



## **NTC thermistors for temperature measurement**

Glass-encapsulated sensors,  
standard type

**Series/Type:**      **B57560**  
**Date:**              March 2006

### Applications

- Automotive electronics
- Industrial electronics
- Home appliances

### Features

- Glass-encapsulated, heat-resistive and highly stable
- For temperature measurement up to 300 °C
- Fast response
- Leads: dumet wires (copper-clad FeNi)

### Options

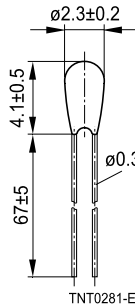
Leads: nickel-plated dumet wires.

Alternative dimensions available on request.

### Delivery mode

Bulk

### Dimensional drawing



Dimensions in mm

### General technical data

|                               |               |                  |                              |      |
|-------------------------------|---------------|------------------|------------------------------|------|
| Climatic category             | (IEC 60068-1) |                  | 55/300/56                    |      |
| Max. power                    | (at 25 °C)    | $P_{25}$         | 50                           | mW   |
| Resistance tolerance          |               | $\Delta R_R/R_R$ | $\pm 1, \pm 2, \pm 3, \pm 5$ | %    |
| Rated temperature             |               | $T_R$            | 25                           | °C   |
| Dissipation factor            | (in air)      | $\delta_{th}$    | approx. 1.3                  | mW/K |
| Thermal cooling time constant | (in air)      | $\tau_c$         | approx. 15                   | s    |
| Heat capacity                 |               | $C_{th}$         | approx. 20                   | mJ/K |

# Electrical specification and ordering codes

| $R_{25}$<br>$\Omega$ | No. of R/T<br>characteristic | $B_{25/85}$<br>K | $B_{0/100}$<br>K    | $B_{25/100}$<br>K | Ordering code   |
|----------------------|------------------------------|------------------|---------------------|-------------------|-----------------|
| 2 k                  | 8401                         | 3420             | $3390 \pm 1\%$      | 3436              | B57560G0202+00* |
| 5 k                  | 8402                         | 3480             | $3450 \pm 1\%$      | 3497              | B57560G0502+00* |
| 10 k                 | 8407                         | 3480             | $3450 \pm 1\%$      | 3497              | B57560G0103+00* |
| 20 k                 | 8415                         | 3992             | $3970 \pm 1\%$      | 4006              | B57560G0203+00* |
| 30 k                 | 8415                         | 3992             | $3970 \pm 1\%$      | 4006              | B57560G0303+00* |
| 50 k                 | 8403                         | 3992             | $3970 \pm 1\%$      | 4006              | B57560G0503+00* |
| 100 k                | 8404                         | 4066             | $4036 \pm 1\%$      | 4085              | B57560G0104+00* |
| 230 k                | 8405                         | 4240             | $4537 \pm 1^{1)}\%$ | 4264              | B57560G0234+00* |
| 1400 k               | 8406                         | 4557             | $5133 \pm 2^{2)}\%$ | 4581              | B57560G0145+00* |

+ = Resistance tolerance

F =  $\pm 1\%$ 

G =  $\pm 2\%$ 

H =  $\pm 3\%$ 

J =  $\pm 5\%$ 

\* = Leads

0 = dumet wires

2 = nickel-plated wires

# Reliability data

| Test                               | Standard          | Test conditions                                                                            | $\Delta R_{25}/R_{25}$<br>(typical) | Remarks           |
|------------------------------------|-------------------|--------------------------------------------------------------------------------------------|-------------------------------------|-------------------|
| Storage in dry heat                | IEC<br>60068-2-2  | Storage at upper category temperature<br>T: 300 °C<br>t: 1000 h                            | < 3%                                | No visible damage |
| Storage in damp heat, steady state | IEC<br>60068-2-67 | Temperature of air: 85 °C<br>Relative humidity of air: 85%<br>Duration: 56 days            | < 2%                                | No visible damage |
| Rapid temperature cycling          | IEC<br>60068-2-14 | Lower test temperature: -55 °C<br>Upper test temperature: 200 °C<br>Number of cycles: 1000 | < 2%                                | No visible damage |

1)  $B_{100/200}$ 

2)  $B_{200/300}$

## R/T characteristics

|             | B57560G0202F000                                                                                                                   |                           |                           |                         |                               |                 |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|-----------------|
| R/T No.     | 8401                                                                                                                              |                           |                           |                         |                               |                 |
| T (°C)      | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1 \%$ |                           |                           |                         |                               |                 |
|             | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| −55.0       | 96473                                                                                                                             | 91360                     | 101590                    | 5.3                     | 0.8                           | 6.2             |
| −50.0       | 70975                                                                                                                             | 67473                     | 74477                     | 4.9                     | 0.8                           | 6.0             |
| −45.0       | 52779                                                                                                                             | 50359                     | 55200                     | 4.6                     | 0.8                           | 5.8             |
| −40.0       | 39650                                                                                                                             | 37963                     | 41336                     | 4.3                     | 0.8                           | 5.6             |
| −35.0       | 30075                                                                                                                             | 28891                     | 31258                     | 3.9                     | 0.7                           | 5.4             |
| −30.0       | 23023                                                                                                                             | 22187                     | 23859                     | 3.6                     | 0.7                           | 5.3             |
| −25.0       | 17779                                                                                                                             | 17185                     | 18373                     | 3.3                     | 0.7                           | 5.1             |
| −20.0       | 13844                                                                                                                             | 13420                     | 14267                     | 3.1                     | 0.6                           | 4.9             |
| −15.0       | 10865                                                                                                                             | 10561                     | 11169                     | 2.8                     | 0.6                           | 4.8             |
| −10.0       | 8592                                                                                                                              | 8374                      | 8810                      | 2.5                     | 0.5                           | 4.6             |
| −5.0        | 6844                                                                                                                              | 6687                      | 7001                      | 2.3                     | 0.5                           | 4.5             |
| 0.0         | 5489                                                                                                                              | 5376                      | 5602                      | 2.1                     | 0.5                           | 4.3             |
| 5.0         | 4432                                                                                                                              | 4350                      | 4513                      | 1.8                     | 0.4                           | 4.2             |
| 10.0        | 3600                                                                                                                              | 3542                      | 3658                      | 1.6                     | 0.4                           | 4.1             |
| 15.0        | 2943                                                                                                                              | 2902                      | 2984                      | 1.4                     | 0.4                           | 4.0             |
| 20.0        | 2419                                                                                                                              | 2390                      | 2448                      | 1.2                     | 0.3                           | 3.9             |
| <b>25.0</b> | <b>2000</b>                                                                                                                       | <b>1980</b>               | <b>2020</b>               | <b>1.0</b>              | <b>0.3</b>                    | <b>3.8</b>      |
| 30.0        | 1662                                                                                                                              | 1642                      | 1682                      | 1.2                     | 0.3                           | 3.6             |
| 35.0        | 1389                                                                                                                              | 1369                      | 1408                      | 1.4                     | 0.4                           | 3.5             |
| 40.0        | 1166                                                                                                                              | 1148                      | 1184                      | 1.6                     | 0.4                           | 3.5             |
| 45.0        | 983.2                                                                                                                             | 966.2                     | 1000                      | 1.7                     | 0.5                           | 3.4             |
| 50.0        | 833.0                                                                                                                             | 817.3                     | 848.8                     | 1.9                     | 0.6                           | 3.3             |
| 55.0        | 708.9                                                                                                                             | 694.4                     | 723.5                     | 2.1                     | 0.6                           | 3.2             |
| 60.0        | 605.8                                                                                                                             | 592.4                     | 619.3                     | 2.2                     | 0.7                           | 3.1             |
| 65.0        | 519.9                                                                                                                             | 507.6                     | 532.2                     | 2.4                     | 0.8                           | 3.0             |
| 70.0        | 447.8                                                                                                                             | 436.6                     | 459.1                     | 2.5                     | 0.9                           | 2.9             |
| 75.0        | 387.3                                                                                                                             | 376.9                     | 397.6                     | 2.7                     | 0.9                           | 2.9             |
| 80.0        | 336.1                                                                                                                             | 326.7                     | 345.5                     | 2.8                     | 1.0                           | 2.8             |
| 85.0        | 292.7                                                                                                                             | 284.1                     | 301.3                     | 2.9                     | 1.1                           | 2.7             |
| 90.0        | 255.8                                                                                                                             | 247.9                     | 263.7                     | 3.1                     | 1.2                           | 2.7             |
| 95.0        | 224.3                                                                                                                             | 217.1                     | 231.5                     | 3.2                     | 1.2                           | 2.6             |
| 100.0       | 197.3                                                                                                                             | 190.7                     | 203.8                     | 3.3                     | 1.3                           | 2.5             |
| 105.0       | 174.0                                                                                                                             | 168.0                     | 180.1                     | 3.5                     | 1.4                           | 2.5             |
| 110.0       | 154.0                                                                                                                             | 148.5                     | 159.5                     | 3.6                     | 1.5                           | 2.4             |
| 115.0       | 136.7                                                                                                                             | 131.6                     | 141.7                     | 3.7                     | 1.6                           | 2.4             |
| 120.0       | 121.6                                                                                                                             | 117.0                     | 126.3                     | 3.8                     | 1.7                           | 2.3             |
| 125.0       | 108.5                                                                                                                             | 104.3                     | 112.8                     | 3.9                     | 1.7                           | 2.3             |
| 130.0       | 97.11                                                                                                                             | 93.19                     | 101.0                     | 4.0                     | 1.8                           | 2.2             |
| 135.0       | 87.10                                                                                                                             | 83.49                     | 90.71                     | 4.1                     | 1.9                           | 2.2             |

| B57560G0202F000 |                                                                                                                                  |                          |                          |                         |                               |                 |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|-----------------|
| R/T No.         | 8401                                                                                                                             |                          |                          |                         |                               |                 |
| T (°C)          | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                          |                          |                         |                               |                 |
|                 | $R_{\text{nom}}[\Omega]$                                                                                                         | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 140.0           | 78.32                                                                                                                            | 74.99                    | 81.64                    | 4.2                     | 2.0                           | 2.1             |
| 145.0           | 70.59                                                                                                                            | 67.52                    | 73.66                    | 4.3                     | 2.1                           | 2.1             |
| 150.0           | 63.77                                                                                                                            | 60.93                    | 66.61                    | 4.4                     | 2.2                           | 2.0             |
| 155.0           | 57.74                                                                                                                            | 55.11                    | 60.37                    | 4.5                     | 2.3                           | 2.0             |
| 160.0           | 52.39                                                                                                                            | 49.96                    | 54.83                    | 4.6                     | 2.4                           | 1.9             |
| 165.0           | 47.64                                                                                                                            | 45.39                    | 49.90                    | 4.7                     | 2.5                           | 1.9             |
| 170.0           | 43.41                                                                                                                            | 41.32                    | 45.51                    | 4.8                     | 2.6                           | 1.8             |
| 175.0           | 39.64                                                                                                                            | 37.69                    | 41.59                    | 4.9                     | 2.7                           | 1.8             |
| 180.0           | 36.26                                                                                                                            | 34.45                    | 38.08                    | 5.0                     | 2.8                           | 1.8             |
| 185.0           | 33.24                                                                                                                            | 31.55                    | 34.93                    | 5.1                     | 3.0                           | 1.7             |
| 190.0           | 30.52                                                                                                                            | 28.94                    | 32.10                    | 5.2                     | 3.1                           | 1.7             |
| 195.0           | 28.08                                                                                                                            | 26.60                    | 29.55                    | 5.3                     | 3.2                           | 1.7             |
| 200.0           | 25.87                                                                                                                            | 24.49                    | 27.25                    | 5.3                     | 3.3                           | 1.6             |
| 205.0           | 23.88                                                                                                                            | 22.59                    | 25.18                    | 5.4                     | 3.4                           | 1.6             |
| 210.0           | 22.08                                                                                                                            | 20.87                    | 23.30                    | 5.5                     | 3.5                           | 1.6             |
| 215.0           | 20.45                                                                                                                            | 19.31                    | 21.59                    | 5.6                     | 3.7                           | 1.5             |
| 220.0           | 18.97                                                                                                                            | 17.90                    | 20.04                    | 5.6                     | 3.8                           | 1.5             |
| 225.0           | 17.62                                                                                                                            | 16.61                    | 18.63                    | 5.7                     | 3.9                           | 1.5             |
| 230.0           | 16.40                                                                                                                            | 15.45                    | 17.34                    | 5.8                     | 4.1                           | 1.4             |
| 235.0           | 15.28                                                                                                                            | 14.38                    | 16.17                    | 5.9                     | 4.2                           | 1.4             |
| 240.0           | 14.25                                                                                                                            | 13.41                    | 15.10                    | 5.9                     | 4.3                           | 1.4             |
| 245.0           | 13.32                                                                                                                            | 12.52                    | 14.12                    | 6.0                     | 4.5                           | 1.3             |
| 250.0           | 12.46                                                                                                                            | 11.71                    | 13.22                    | 6.1                     | 4.6                           | 1.3             |
| 255.0           | 11.67                                                                                                                            | 10.96                    | 12.39                    | 6.1                     | 4.7                           | 1.3             |
| 260.0           | 10.95                                                                                                                            | 10.27                    | 11.63                    | 6.2                     | 4.9                           | 1.3             |
| 265.0           | 10.29                                                                                                                            | 9.642                    | 10.93                    | 6.3                     | 5.0                           | 1.2             |
| 270.0           | 9.672                                                                                                                            | 9.061                    | 10.28                    | 6.3                     | 5.2                           | 1.2             |
| 275.0           | 9.106                                                                                                                            | 8.526                    | 9.687                    | 6.4                     | 5.3                           | 1.2             |
| 280.0           | 8.584                                                                                                                            | 8.032                    | 9.136                    | 6.4                     | 5.5                           | 1.2             |
| 285.0           | 8.101                                                                                                                            | 7.575                    | 8.627                    | 6.5                     | 5.7                           | 1.1             |
| 290.0           | 7.653                                                                                                                            | 7.152                    | 8.155                    | 6.6                     | 5.8                           | 1.1             |
| 295.0           | 7.238                                                                                                                            | 6.760                    | 7.717                    | 6.6                     | 6.0                           | 1.1             |
| 300.0           | 6.853                                                                                                                            | 6.397                    | 7.310                    | 6.7                     | 6.2                           | 1.1             |

| B57560G0202G000 |                                                                                                                                  |                          |                          |                         |                               |                 |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|-----------------|
| R/T No.         | 8401                                                                                                                             |                          |                          |                         |                               |                 |
| T (°C)          | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                          |                          |                         |                               |                 |
|                 | $R_{\text{nom}}[\Omega]$                                                                                                         | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -55.0           | 96473                                                                                                                            | 90354                    | 102590                   | 6.3                     | 1.0                           | 6.2             |

|         | B57560G0202G000                                                                                                                  |                    |                    |                         |                               |                 |
|---------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No. | 8401                                                                                                                             |                    |                    |                         |                               |                 |
| T (°C)  | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                    |                    |                         |                               |                 |
|         | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -50.0   | 70975                                                                                                                            | 66736              | 75215              | 6.0                     | 1.0                           | 6.0             |
| -45.0   | 52779                                                                                                                            | 49813              | 55746              | 5.6                     | 1.0                           | 5.8             |
| -40.0   | 39650                                                                                                                            | 37554              | 41745              | 5.3                     | 0.9                           | 5.6             |
| -35.0   | 30075                                                                                                                            | 28582              | 31568              | 5.0                     | 0.9                           | 5.4             |
| -30.0   | 23023                                                                                                                            | 21950              | 24095              | 4.7                     | 0.9                           | 5.3             |
| -25.0   | 17779                                                                                                                            | 17003              | 18554              | 4.4                     | 0.9                           | 5.1             |
| -20.0   | 13844                                                                                                                            | 13278              | 14409              | 4.1                     | 0.8                           | 4.9             |
| -15.0   | 10865                                                                                                                            | 10451              | 11279              | 3.8                     | 0.8                           | 4.8             |
| -10.0   | 8592                                                                                                                             | 8287               | 8898               | 3.6                     | 0.8                           | 4.6             |
| -5.0    | 6844                                                                                                                             | 6618               | 7070               | 3.3                     | 0.7                           | 4.5             |
| 0.0     | 5489                                                                                                                             | 5321               | 5657               | 3.1                     | 0.7                           | 4.3             |
| 5.0     | 4432                                                                                                                             | 4306               | 4557               | 2.8                     | 0.7                           | 4.2             |
| 10.0    | 3600                                                                                                                             | 3506               | 3695               | 2.6                     | 0.6                           | 4.1             |
| 15.0    | 2943                                                                                                                             | 2872               | 3014               | 2.4                     | 0.6                           | 4.0             |
| 20.0    | 2419                                                                                                                             | 2366               | 2472               | 2.2                     | 0.6                           | 3.9             |
| 25.0    | <b>2000</b>                                                                                                                      | <b>1960</b>        | <b>2040</b>        | <b>2.0</b>              | <b>0.5</b>                    | <b>3.8</b>      |
| 30.0    | 1662                                                                                                                             | 1626               | 1699               | 2.2                     | 0.6                           | 3.6             |
| 35.0    | 1389                                                                                                                             | 1356               | 1422               | 2.4                     | 0.7                           | 3.5             |
| 40.0    | 1166                                                                                                                             | 1136               | 1195               | 2.6                     | 0.7                           | 3.5             |
| 45.0    | 983.2                                                                                                                            | 956.3              | 1010               | 2.7                     | 0.8                           | 3.4             |
| 50.0    | 833.0                                                                                                                            | 808.9              | 857.2              | 2.9                     | 0.9                           | 3.3             |
| 55.0    | 708.9                                                                                                                            | 687.2              | 730.7              | 3.1                     | 1.0                           | 3.2             |
| 60.0    | 605.8                                                                                                                            | 586.3              | 625.4              | 3.2                     | 1.0                           | 3.1             |
| 65.0    | 519.9                                                                                                                            | 502.3              | 537.4              | 3.4                     | 1.1                           | 3.0             |
| 70.0    | 447.8                                                                                                                            | 432.0              | 463.7              | 3.5                     | 1.2                           | 2.9             |
| 75.0    | 387.3                                                                                                                            | 373.0              | 401.5              | 3.7                     | 1.3                           | 2.9             |
| 80.0    | 336.1                                                                                                                            | 323.2              | 348.9              | 3.8                     | 1.4                           | 2.8             |
| 85.0    | 292.7                                                                                                                            | 281.1              | 304.3              | 4.0                     | 1.5                           | 2.7             |
| 90.0    | 255.8                                                                                                                            | 245.3              | 266.3              | 4.1                     | 1.5                           | 2.7             |
| 95.0    | 224.3                                                                                                                            | 214.8              | 233.8              | 4.2                     | 1.6                           | 2.6             |
| 100.0   | 197.3                                                                                                                            | 188.7              | 205.9              | 4.4                     | 1.7                           | 2.5             |
| 105.0   | 174.0                                                                                                                            | 166.2              | 181.8              | 4.5                     | 1.8                           | 2.5             |
| 110.0   | 154.0                                                                                                                            | 146.9              | 161.1              | 4.6                     | 1.9                           | 2.4             |
| 115.0   | 136.7                                                                                                                            | 130.2              | 143.1              | 4.7                     | 2.0                           | 2.4             |
| 120.0   | 121.6                                                                                                                            | 115.7              | 127.5              | 4.8                     | 2.1                           | 2.3             |
| 125.0   | 108.5                                                                                                                            | 103.2              | 113.9              | 5.0                     | 2.2                           | 2.3             |
| 130.0   | 97.11                                                                                                                            | 92.19              | 102.0              | 5.1                     | 2.3                           | 2.2             |
| 135.0   | 87.10                                                                                                                            | 82.59              | 91.61              | 5.2                     | 2.4                           | 2.2             |
| 140.0   | 78.32                                                                                                                            | 74.18              | 82.45              | 5.3                     | 2.5                           | 2.1             |
| 145.0   | 70.59                                                                                                                            | 66.79              | 74.39              | 5.4                     | 2.6                           | 2.1             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0202G000</b> |                                                                                                                       |                      |                      |                                      |         |         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8401                                                                                                                  |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3390 K, R <sub>25</sub> = 2000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                  | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 150.0                  | 63.77                                                                                                                 | 60.27                | 67.27                | 5.5                                  | 2.7     | 2.0     |
| 155.0                  | 57.74                                                                                                                 | 54.52                | 60.96                | 5.6                                  | 2.8     | 2.0     |
| 160.0                  | 52.39                                                                                                                 | 49.42                | 55.37                | 5.7                                  | 3.0     | 1.9     |
| 165.0                  | 47.64                                                                                                                 | 44.89                | 50.39                | 5.8                                  | 3.1     | 1.9     |
| 170.0                  | 43.41                                                                                                                 | 40.87                | 45.96                | 5.9                                  | 3.2     | 1.8     |
| 175.0                  | 39.64                                                                                                                 | 37.28                | 42.00                | 6.0                                  | 3.3     | 1.8     |
| 180.0                  | 36.26                                                                                                                 | 34.07                | 38.46                | 6.0                                  | 3.4     | 1.8     |
| 185.0                  | 33.24                                                                                                                 | 31.20                | 35.28                | 6.1                                  | 3.6     | 1.7     |
| 190.0                  | 30.52                                                                                                                 | 28.62                | 32.42                | 6.2                                  | 3.7     | 1.7     |
| 195.0                  | 28.08                                                                                                                 | 26.31                | 29.85                | 6.3                                  | 3.8     | 1.7     |
| 200.0                  | 25.87                                                                                                                 | 24.22                | 27.52                | 6.4                                  | 3.9     | 1.6     |
| 205.0                  | 23.88                                                                                                                 | 22.34                | 25.43                | 6.5                                  | 4.1     | 1.6     |
| 210.0                  | 22.08                                                                                                                 | 20.64                | 23.53                | 6.5                                  | 4.2     | 1.6     |
| 215.0                  | 20.45                                                                                                                 | 19.10                | 21.80                | 6.6                                  | 4.4     | 1.5     |
| 220.0                  | 18.97                                                                                                                 | 17.70                | 20.24                | 6.7                                  | 4.5     | 1.5     |
| 225.0                  | 17.62                                                                                                                 | 16.43                | 18.81                | 6.8                                  | 4.6     | 1.5     |
| 230.0                  | 16.40                                                                                                                 | 15.27                | 17.52                | 6.8                                  | 4.8     | 1.4     |
| 235.0                  | 15.28                                                                                                                 | 14.22                | 16.33                | 6.9                                  | 4.9     | 1.4     |
| 240.0                  | 14.25                                                                                                                 | 13.26                | 15.25                | 7.0                                  | 5.1     | 1.4     |
| 245.0                  | 13.32                                                                                                                 | 12.38                | 14.26                | 7.0                                  | 5.2     | 1.3     |
| 250.0                  | 12.46                                                                                                                 | 11.57                | 13.35                | 7.1                                  | 5.4     | 1.3     |
| 255.0                  | 11.67                                                                                                                 | 10.84                | 12.51                | 7.2                                  | 5.6     | 1.3     |
| 260.0                  | 10.95                                                                                                                 | 10.16                | 11.74                | 7.2                                  | 5.7     | 1.3     |
| 265.0                  | 10.29                                                                                                                 | 9.534                | 11.04                | 7.3                                  | 5.9     | 1.2     |
| 270.0                  | 9.672                                                                                                                 | 8.959                | 10.38                | 7.4                                  | 6.1     | 1.2     |
| 275.0                  | 9.106                                                                                                                 | 8.430                | 9.783                | 7.4                                  | 6.2     | 1.2     |
| 280.0                  | 8.584                                                                                                                 | 7.941                | 9.227                | 7.5                                  | 6.4     | 1.2     |
| 285.0                  | 8.101                                                                                                                 | 7.489                | 8.712                | 7.5                                  | 6.6     | 1.1     |
| 290.0                  | 7.653                                                                                                                 | 7.071                | 8.235                | 7.6                                  | 6.8     | 1.1     |
| 295.0                  | 7.238                                                                                                                 | 6.684                | 7.793                | 7.7                                  | 6.9     | 1.1     |
| 300.0                  | 6.853                                                                                                                 | 6.324                | 7.382                | 7.7                                  | 7.1     | 1.1     |

| <b>B57560G0202H000</b> |                                                                                                                       |                      |                      |                                      |         |         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8401                                                                                                                  |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3390 K, R <sub>25</sub> = 2000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                  | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| -55.0                  | 96473                                                                                                                 | 89348                | 103600               | 7.4                                  | 1.2     | 6.2     |
| -50.0                  | 70975                                                                                                                 | 65998                | 75952                | 7.0                                  | 1.2     | 6.0     |
| -45.0                  | 52779                                                                                                                 | 49266                | 56293                | 6.7                                  | 1.1     | 5.8     |

|             | B57560G0202H000                                                                                                                  |                    |                    |                         |                               |                                |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.     | 8401                                                                                                                             |                    |                    |                         |                               |                                |
| T (°C)      | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                    |                    |                         |                               |                                |
|             | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| -40.0       | 39650                                                                                                                            | 37145              | 42154              | 6.3                     | 1.1                           | 5.6                            |
| -35.0       | 30075                                                                                                                            | 28273              | 31877              | 6.0                     | 1.1                           | 5.4                            |
| -30.0       | 23023                                                                                                                            | 21714              | 24331              | 5.7                     | 1.1                           | 5.3                            |
| -25.0       | 17779                                                                                                                            | 16821              | 18736              | 5.4                     | 1.1                           | 5.1                            |
| -20.0       | 13844                                                                                                                            | 13137              | 14550              | 5.1                     | 1.0                           | 4.9                            |
| -15.0       | 10865                                                                                                                            | 10340              | 11390              | 4.8                     | 1.0                           | 4.8                            |
| -10.0       | 8592                                                                                                                             | 8200               | 8985               | 4.6                     | 1.0                           | 4.6                            |
| -5.0        | 6844                                                                                                                             | 6548               | 7140               | 4.3                     | 1.0                           | 4.5                            |
| 0.0         | 5489                                                                                                                             | 5265               | 5713               | 4.1                     | 0.9                           | 4.3                            |
| 5.0         | 4432                                                                                                                             | 4261               | 4602               | 3.8                     | 0.9                           | 4.2                            |
| 10.0        | 3600                                                                                                                             | 3470               | 3731               | 3.6                     | 0.9                           | 4.1                            |
| 15.0        | 2943                                                                                                                             | 2843               | 3043               | 3.4                     | 0.9                           | 4.0                            |
| 20.0        | 2419                                                                                                                             | 2342               | 2497               | 3.2                     | 0.8                           | 3.9                            |
| <b>25.0</b> | <b>2000</b>                                                                                                                      | <b>1940</b>        | <b>2060</b>        | <b>3.0</b>              | <b>0.8</b>                    | <b>3.8</b>                     |
| 30.0        | 1662                                                                                                                             | 1609               | 1715               | 3.2                     | 0.9                           | 3.6                            |
| 35.0        | 1389                                                                                                                             | 1342               | 1435               | 3.4                     | 1.0                           | 3.5                            |
| 40.0        | 1166                                                                                                                             | 1124               | 1207               | 3.6                     | 1.0                           | 3.5                            |
| 45.0        | 983.2                                                                                                                            | 946.4              | 1020               | 3.7                     | 1.1                           | 3.4                            |
| 50.0        | 833.0                                                                                                                            | 800.5              | 865.6              | 3.9                     | 1.2                           | 3.3                            |
| 55.0        | 708.9                                                                                                                            | 680.0              | 737.8              | 4.1                     | 1.3                           | 3.2                            |
| 60.0        | 605.8                                                                                                                            | 580.2              | 631.5              | 4.2                     | 1.4                           | 3.1                            |
| 65.0        | 519.9                                                                                                                            | 497.0              | 542.7              | 4.4                     | 1.5                           | 3.0                            |
| 70.0        | 447.8                                                                                                                            | 427.5              | 468.2              | 4.5                     | 1.5                           | 2.9                            |
| 75.0        | 387.3                                                                                                                            | 369.1              | 405.4              | 4.7                     | 1.6                           | 2.9                            |
| 80.0        | 336.1                                                                                                                            | 319.8              | 352.4              | 4.8                     | 1.7                           | 2.8                            |
| 85.0        | 292.7                                                                                                                            | 278.1              | 307.3              | 5.0                     | 1.8                           | 2.7                            |
| 90.0        | 255.8                                                                                                                            | 242.7              | 268.9              | 5.1                     | 1.9                           | 2.7                            |
| 95.0        | 224.3                                                                                                                            | 212.5              | 236.1              | 5.3                     | 2.0                           | 2.6                            |
| 100.0       | 197.3                                                                                                                            | 186.7              | 207.9              | 5.4                     | 2.1                           | 2.5                            |
| 105.0       | 174.0                                                                                                                            | 164.5              | 183.6              | 5.5                     | 2.2                           | 2.5                            |
| 110.0       | 154.0                                                                                                                            | 145.3              | 162.7              | 5.6                     | 2.3                           | 2.4                            |
| 115.0       | 136.7                                                                                                                            | 128.8              | 144.5              | 5.8                     | 2.4                           | 2.4                            |
| 120.0       | 121.6                                                                                                                            | 114.5              | 128.8              | 5.9                     | 2.5                           | 2.3                            |
| 125.0       | 108.5                                                                                                                            | 102.0              | 115.0              | 6.0                     | 2.7                           | 2.3                            |
| 130.0       | 97.11                                                                                                                            | 91.19              | 103.0              | 6.1                     | 2.8                           | 2.2                            |
| 135.0       | 87.10                                                                                                                            | 81.70              | 92.51              | 6.2                     | 2.9                           | 2.2                            |
| 140.0       | 78.32                                                                                                                            | 73.37              | 83.26              | 6.3                     | 3.0                           | 2.1                            |
| 145.0       | 70.59                                                                                                                            | 66.06              | 75.12              | 6.4                     | 3.1                           | 2.1                            |
| 150.0       | 63.77                                                                                                                            | 59.61              | 67.93              | 6.5                     | 3.2                           | 2.0                            |
| 155.0       | 57.74                                                                                                                            | 53.92              | 61.56              | 6.6                     | 3.4                           | 2.0                            |



| B57560G0202H000 |                                                                                                                                  |                          |                          |                         |                               |                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.         | 8401                                                                                                                             |                          |                          |                         |                               |                                |
| T (°C)          | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                          |                          |                         |                               |                                |
|                 | $R_{\text{nom}}[\Omega]$                                                                                                         | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 160.0           | 52.39                                                                                                                            | 48.88                    | 55.91                    | 6.7                     | 3.5                           | 1.9                            |
| 165.0           | 47.64                                                                                                                            | 44.40                    | 50.89                    | 6.8                     | 3.6                           | 1.9                            |
| 170.0           | 43.41                                                                                                                            | 40.42                    | 46.41                    | 6.9                     | 3.8                           | 1.8                            |
| 175.0           | 39.64                                                                                                                            | 36.87                    | 42.41                    | 7.0                     | 3.9                           | 1.8                            |
| 180.0           | 36.26                                                                                                                            | 33.69                    | 38.83                    | 7.1                     | 4.0                           | 1.8                            |
| 185.0           | 33.24                                                                                                                            | 30.85                    | 35.62                    | 7.2                     | 4.2                           | 1.7                            |
| 190.0           | 30.52                                                                                                                            | 28.31                    | 32.74                    | 7.3                     | 4.3                           | 1.7                            |
| 195.0           | 28.08                                                                                                                            | 26.02                    | 30.14                    | 7.3                     | 4.4                           | 1.7                            |
| 200.0           | 25.87                                                                                                                            | 23.95                    | 27.79                    | 7.4                     | 4.6                           | 1.6                            |
| 205.0           | 23.88                                                                                                                            | 22.09                    | 25.68                    | 7.5                     | 4.7                           | 1.6                            |
| 210.0           | 22.08                                                                                                                            | 20.41                    | 23.76                    | 7.6                     | 4.9                           | 1.6                            |
| 215.0           | 20.45                                                                                                                            | 18.88                    | 22.02                    | 7.7                     | 5.0                           | 1.5                            |
| 220.0           | 18.97                                                                                                                            | 17.50                    | 20.44                    | 7.7                     | 5.2                           | 1.5                            |
| 225.0           | 17.62                                                                                                                            | 16.25                    | 19.00                    | 7.8                     | 5.4                           | 1.5                            |
| 230.0           | 16.40                                                                                                                            | 15.10                    | 17.69                    | 7.9                     | 5.5                           | 1.4                            |
| 235.0           | 15.28                                                                                                                            | 14.06                    | 16.49                    | 8.0                     | 5.7                           | 1.4                            |
| 240.0           | 14.25                                                                                                                            | 13.11                    | 15.40                    | 8.0                     | 5.9                           | 1.4                            |
| 245.0           | 13.32                                                                                                                            | 12.24                    | 14.40                    | 8.1                     | 6.0                           | 1.3                            |
| 250.0           | 12.46                                                                                                                            | 11.44                    | 13.48                    | 8.2                     | 6.2                           | 1.3                            |
| 255.0           | 11.67                                                                                                                            | 10.71                    | 12.63                    | 8.2                     | 6.4                           | 1.3                            |
| 260.0           | 10.95                                                                                                                            | 10.04                    | 11.86                    | 8.3                     | 6.5                           | 1.3                            |
| 265.0           | 10.29                                                                                                                            | 9.426                    | 11.14                    | 8.4                     | 6.7                           | 1.2                            |
| 270.0           | 9.672                                                                                                                            | 8.858                    | 10.49                    | 8.4                     | 6.9                           | 1.2                            |
| 275.0           | 9.106                                                                                                                            | 8.334                    | 9.879                    | 8.5                     | 7.1                           | 1.2                            |
| 280.0           | 8.584                                                                                                                            | 7.851                    | 9.317                    | 8.5                     | 7.3                           | 1.2                            |
| 285.0           | 8.101                                                                                                                            | 7.404                    | 8.798                    | 8.6                     | 7.5                           | 1.1                            |
| 290.0           | 7.653                                                                                                                            | 6.990                    | 8.316                    | 8.7                     | 7.7                           | 1.1                            |
| 295.0           | 7.238                                                                                                                            | 6.607                    | 7.869                    | 8.7                     | 7.9                           | 1.1                            |
| 300.0           | 6.853                                                                                                                            | 6.252                    | 7.455                    | 8.8                     | 8.1                           | 1.1                            |

| B57560G0202J000 |                                                                                                                                  |                          |                          |                         |                               |                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.         | 8401                                                                                                                             |                          |                          |                         |                               |                                |
| T (°C)          | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                          |                          |                         |                               |                                |
|                 | $R_{\text{nom}}[\Omega]$                                                                                                         | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0           | 96473                                                                                                                            | 87337                    | 105610                   | 9.5                     | 1.5                           | 6.2                            |
| −50.0           | 70975                                                                                                                            | 64523                    | 77427                    | 9.1                     | 1.5                           | 6.0                            |
| −45.0           | 52779                                                                                                                            | 48173                    | 57386                    | 8.7                     | 1.5                           | 5.8                            |
| −40.0           | 39650                                                                                                                            | 36326                    | 42973                    | 8.4                     | 1.5                           | 5.6                            |
| −35.0           | 30075                                                                                                                            | 27654                    | 32496                    | 8.1                     | 1.5                           | 5.4                            |

|             | B57560G0202J000                                                                                                                  |                    |                    |                         |                               |                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.     | 8401                                                                                                                             |                    |                    |                         |                               |                 |
| T (°C)      | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                    |                    |                         |                               |                 |
|             | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -30.0       | 23023                                                                                                                            | 21242              | 24804              | 7.7                     | 1.5                           | 5.3             |
| -25.0       | 17779                                                                                                                            | 16457              | 19100              | 7.4                     | 1.5                           | 5.1             |
| -20.0       | 13844                                                                                                                            | 12855              | 14833              | 7.1                     | 1.5                           | 4.9             |
| -15.0       | 10865                                                                                                                            | 10119              | 11611              | 6.9                     | 1.4                           | 4.8             |
| -10.0       | 8592                                                                                                                             | 8025               | 9159               | 6.6                     | 1.4                           | 4.6             |
| -5.0        | 6844                                                                                                                             | 6410               | 7278               | 6.3                     | 1.4                           | 4.5             |
| 0.0         | 5489                                                                                                                             | 5154               | 5824               | 6.1                     | 1.4                           | 4.3             |
| 5.0         | 4432                                                                                                                             | 4172               | 4691               | 5.9                     | 1.4                           | 4.2             |
| 10.0        | 3600                                                                                                                             | 3398               | 3803               | 5.6                     | 1.4                           | 4.1             |
| 15.0        | 2943                                                                                                                             | 2783               | 3102               | 5.4                     | 1.4                           | 4.0             |
| 20.0        | 2419                                                                                                                             | 2293               | 2545               | 5.2                     | 1.3                           | 3.9             |
| <b>25.0</b> | <b>2000</b>                                                                                                                      | <b>1900</b>        | <b>2100</b>        | <b>5.0</b>              | <b>1.3</b>                    | <b>3.8</b>      |
| 30.0        | 1662                                                                                                                             | 1576               | 1749               | 5.2                     | 1.4                           | 3.6             |
| 35.0        | 1389                                                                                                                             | 1314               | 1463               | 5.4                     | 1.5                           | 3.5             |
| 40.0        | 1166                                                                                                                             | 1101               | 1231               | 5.6                     | 1.6                           | 3.5             |
| 45.0        | 983.2                                                                                                                            | 926.6              | 1040               | 5.8                     | 1.7                           | 3.4             |
| 50.0        | 833.0                                                                                                                            | 783.7              | 882.4              | 5.9                     | 1.8                           | 3.3             |
| 55.0        | 708.9                                                                                                                            | 665.7              | 752.1              | 6.1                     | 1.9                           | 3.2             |
| 60.0        | 605.8                                                                                                                            | 567.9              | 643.8              | 6.3                     | 2.0                           | 3.1             |
| 65.0        | 519.9                                                                                                                            | 486.5              | 553.3              | 6.4                     | 2.1                           | 3.0             |
| 70.0        | 447.8                                                                                                                            | 418.4              | 477.3              | 6.6                     | 2.2                           | 2.9             |
| 75.0        | 387.3                                                                                                                            | 361.2              | 413.3              | 6.7                     | 2.3                           | 2.9             |
| 80.0        | 336.1                                                                                                                            | 313.0              | 359.2              | 6.9                     | 2.5                           | 2.8             |
| 85.0        | 292.7                                                                                                                            | 272.2              | 313.3              | 7.0                     | 2.6                           | 2.7             |
| 90.0        | 255.8                                                                                                                            | 237.5              | 274.1              | 7.2                     | 2.7                           | 2.7             |
| 95.0        | 224.3                                                                                                                            | 207.9              | 240.6              | 7.3                     | 2.8                           | 2.6             |
| 100.0       | 197.3                                                                                                                            | 182.6              | 211.9              | 7.4                     | 2.9                           | 2.5             |
| 105.0       | 174.0                                                                                                                            | 160.9              | 187.2              | 7.6                     | 3.1                           | 2.5             |
| 110.0       | 154.0                                                                                                                            | 142.2              | 165.8              | 7.7                     | 3.2                           | 2.4             |
| 115.0       | 136.7                                                                                                                            | 126.0              | 147.3              | 7.8                     | 3.3                           | 2.4             |
| 120.0       | 121.6                                                                                                                            | 112.0              | 131.3              | 7.9                     | 3.4                           | 2.3             |
| 125.0       | 108.5                                                                                                                            | 99.81              | 117.3              | 8.0                     | 3.6                           | 2.3             |
| 130.0       | 97.11                                                                                                                            | 89.19              | 105.0              | 8.2                     | 3.7                           | 2.2             |
| 135.0       | 87.10                                                                                                                            | 79.90              | 94.30              | 8.3                     | 3.8                           | 2.2             |
| 140.0       | 78.32                                                                                                                            | 71.76              | 84.88              | 8.4                     | 4.0                           | 2.1             |
| 145.0       | 70.59                                                                                                                            | 64.60              | 76.58              | 8.5                     | 4.1                           | 2.1             |
| 150.0       | 63.77                                                                                                                            | 58.29              | 69.25              | 8.6                     | 4.3                           | 2.0             |
| 155.0       | 57.74                                                                                                                            | 52.72              | 62.76              | 8.7                     | 4.4                           | 2.0             |
| 160.0       | 52.39                                                                                                                            | 47.79              | 57.00              | 8.8                     | 4.6                           | 1.9             |
| 165.0       | 47.64                                                                                                                            | 43.41              | 51.88              | 8.9                     | 4.7                           | 1.9             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0202J000</b> |                                                                                                            |                   |                   |                         |                               |                 |
|------------------------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|-------------------------------|-----------------|
| R/T No.                | 8401                                                                                                       |                   |                   |                         |                               |                 |
| T (°C)                 | $B_{0/100} = 3390 \text{ K}$ , $R_{25} = 2000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                   |                   |                         |                               |                 |
|                        | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 170.0                  | 43.41                                                                                                      | 39.52             | 47.31             | 9.0                     | 4.9                           | 1.8             |
| 175.0                  | 39.64                                                                                                      | 36.04             | 43.24             | 9.1                     | 5.0                           | 1.8             |
| 180.0                  | 36.26                                                                                                      | 32.94             | 39.59             | 9.2                     | 5.2                           | 1.8             |
| 185.0                  | 33.24                                                                                                      | 30.16             | 36.31             | 9.3                     | 5.4                           | 1.7             |
| 190.0                  | 30.52                                                                                                      | 27.67             | 33.37             | 9.3                     | 5.5                           | 1.7             |
| 195.0                  | 28.08                                                                                                      | 25.43             | 30.72             | 9.4                     | 5.7                           | 1.7             |
| 200.0                  | 25.87                                                                                                      | 23.41             | 28.33             | 9.5                     | 5.9                           | 1.6             |
| 205.0                  | 23.88                                                                                                      | 21.59             | 26.17             | 9.6                     | 6.1                           | 1.6             |
| 210.0                  | 22.08                                                                                                      | 19.95             | 24.22             | 9.7                     | 6.2                           | 1.6             |
| 215.0                  | 20.45                                                                                                      | 18.46             | 22.45             | 9.8                     | 6.4                           | 1.5             |
| 220.0                  | 18.97                                                                                                      | 17.11             | 20.83             | 9.8                     | 6.6                           | 1.5             |
| 225.0                  | 17.62                                                                                                      | 15.88             | 19.37             | 9.9                     | 6.8                           | 1.5             |
| 230.0                  | 16.40                                                                                                      | 14.76             | 18.03             | 10.0                    | 7.0                           | 1.4             |
| 235.0                  | 15.28                                                                                                      | 13.74             | 16.81             | 10.1                    | 7.2                           | 1.4             |
| 240.0                  | 14.25                                                                                                      | 12.81             | 15.70             | 10.1                    | 7.4                           | 1.4             |
| 245.0                  | 13.32                                                                                                      | 11.96             | 14.68             | 10.2                    | 7.6                           | 1.3             |
| 250.0                  | 12.46                                                                                                      | 11.18             | 13.74             | 10.3                    | 7.8                           | 1.3             |
| 255.0                  | 11.67                                                                                                      | 10.47             | 12.88             | 10.3                    | 8.0                           | 1.3             |
| 260.0                  | 10.95                                                                                                      | 9.812             | 12.09             | 10.4                    | 8.2                           | 1.3             |
| 265.0                  | 10.29                                                                                                      | 9.209             | 11.36             | 10.5                    | 8.4                           | 1.2             |
| 270.0                  | 9.672                                                                                                      | 8.654             | 10.69             | 10.5                    | 8.6                           | 1.2             |
| 275.0                  | 9.106                                                                                                      | 8.142             | 10.07             | 10.6                    | 8.9                           | 1.2             |
| 280.0                  | 8.584                                                                                                      | 7.670             | 9.498             | 10.7                    | 9.1                           | 1.2             |
| 285.0                  | 8.101                                                                                                      | 7.233             | 8.968             | 10.7                    | 9.3                           | 1.1             |
| 290.0                  | 7.653                                                                                                      | 6.829             | 8.478             | 10.8                    | 9.6                           | 1.1             |
| 295.0                  | 7.238                                                                                                      | 6.454             | 8.022             | 10.8                    | 9.8                           | 1.1             |
| 300.0                  | 6.853                                                                                                      | 6.107             | 7.599             | 10.9                    | 10.1                          | 1.1             |

| <b>B57560G0502F000</b> |                                                                                                            |                   |                   |                         |                               |                 |
|------------------------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|-------------------------------|-----------------|
| R/T No.                | 8402                                                                                                       |                   |                   |                         |                               |                 |
| T (°C)                 | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 1\%$ |                   |                   |                         |                               |                 |
|                        | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -55.0                  | 259960                                                                                                     | 245980            | 273940            | 5.4                     | 0.8                           | 6.4             |
| -50.0                  | 189950                                                                                                     | 180440            | 199450            | 5.0                     | 0.8                           | 6.2             |
| -45.0                  | 140350                                                                                                     | 133820            | 146880            | 4.7                     | 0.8                           | 5.9             |
| -40.0                  | 104800                                                                                                     | 100280            | 109320            | 4.3                     | 0.8                           | 5.7             |
| -35.0                  | 79044                                                                                                      | 75892             | 82196             | 4.0                     | 0.7                           | 5.5             |
| -30.0                  | 60186                                                                                                      | 57972             | 62400             | 3.7                     | 0.7                           | 5.4             |
| -25.0                  | 46242                                                                                                      | 44678             | 47806             | 3.4                     | 0.7                           | 5.2             |

|             | B57560G0502F000                                                                                                                  |                    |                    |                         |                               |                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.     | 8402                                                                                                                             |                    |                    |                         |                               |                 |
| T (°C)      | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                    |                    |                         |                               |                 |
|             | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -20.0       | 35834                                                                                                                            | 34724              | 36945              | 3.1                     | 0.6                           | 5.0             |
| -15.0       | 27996                                                                                                                            | 27205              | 28788              | 2.8                     | 0.6                           | 4.9             |
| -10.0       | 22043                                                                                                                            | 21478              | 22609              | 2.6                     | 0.5                           | 4.7             |
| -5.0        | 17485                                                                                                                            | 17080              | 17890              | 2.3                     | 0.5                           | 4.6             |
| 0.0         | 13968                                                                                                                            | 13678              | 14258              | 2.1                     | 0.5                           | 4.4             |
| 5.0         | 11234                                                                                                                            | 11027              | 11441              | 1.8                     | 0.4                           | 4.3             |
| 10.0        | 9094                                                                                                                             | 8946               | 9241               | 1.6                     | 0.4                           | 4.2             |
| 15.0        | 7407                                                                                                                             | 7302               | 7511               | 1.4                     | 0.3                           | 4.0             |
| 20.0        | 6068                                                                                                                             | 5995               | 6141               | 1.2                     | 0.3                           | 3.9             |
| <b>25.0</b> | <b>5000</b>                                                                                                                      | <b>4950</b>        | <b>5050</b>        | <b>1.0</b>              | <b>0.3</b>                    | <b>3.8</b>      |
| 30.0        | 4142                                                                                                                             | 4093               | 4192               | 1.2                     | 0.3                           | 3.7             |
| 35.0        | 3450                                                                                                                             | 3402               | 3497               | 1.4                     | 0.4                           | 3.6             |
| 40.0        | 2887                                                                                                                             | 2842               | 2932               | 1.6                     | 0.4                           | 3.5             |
| 45.0        | 2428                                                                                                                             | 2386               | 2470               | 1.7                     | 0.5                           | 3.4             |
| 50.0        | 2051                                                                                                                             | 2012               | 2090               | 1.9                     | 0.6                           | 3.3             |
| 55.0        | 1741                                                                                                                             | 1705               | 1777               | 2.1                     | 0.6                           | 3.2             |
| 60.0        | 1484                                                                                                                             | 1450               | 1517               | 2.2                     | 0.7                           | 3.2             |
| 65.0        | 1270                                                                                                                             | 1239               | 1300               | 2.4                     | 0.8                           | 3.1             |
| 70.0        | 1091                                                                                                                             | 1063               | 1119               | 2.5                     | 0.8                           | 3.0             |
| 75.0        | 940.8                                                                                                                            | 915.5              | 966.2              | 2.7                     | 0.9                           | 2.9             |
| 80.0        | 814.4                                                                                                                            | 791.3              | 837.5              | 2.8                     | 1.0                           | 2.8             |
| 85.0        | 707.5                                                                                                                            | 686.5              | 728.6              | 3.0                     | 1.1                           | 2.8             |
| 90.0        | 616.8                                                                                                                            | 597.5              | 636.0              | 3.1                     | 1.1                           | 2.7             |
| 95.0        | 539.4                                                                                                                            | 521.9              | 556.9              | 3.2                     | 1.2                           | 2.6             |
| 100.0       | 473.3                                                                                                                            | 457.3              | 489.3              | 3.4                     | 1.3                           | 2.6             |
| 105.0       | 416.6                                                                                                                            | 402.0              | 431.2              | 3.5                     | 1.4                           | 2.5             |
| 110.0       | 367.7                                                                                                                            | 354.4              | 381.1              | 3.6                     | 1.5                           | 2.5             |
| 115.0       | 325.6                                                                                                                            | 313.4              | 337.8              | 3.7                     | 1.6                           | 2.4             |
| 120.0       | 289.0                                                                                                                            | 277.9              | 300.2              | 3.9                     | 1.6                           | 2.4             |
| 125.0       | 257.3                                                                                                                            | 247.1              | 267.6              | 4.0                     | 1.7                           | 2.3             |
| 130.0       | 229.7                                                                                                                            | 220.3              | 239.1              | 4.1                     | 1.8                           | 2.2             |
| 135.0       | 205.5                                                                                                                            | 196.9              | 214.2              | 4.2                     | 1.9                           | 2.2             |
| 140.0       | 184.4                                                                                                                            | 176.4              | 192.3              | 4.3                     | 2.0                           | 2.1             |
| 145.0       | 165.8                                                                                                                            | 158.5              | 173.1              | 4.4                     | 2.1                           | 2.1             |
| 150.0       | 149.4                                                                                                                            | 142.7              | 156.2              | 4.5                     | 2.2                           | 2.1             |
| 155.0       | 135.0                                                                                                                            | 128.8              | 141.2              | 4.6                     | 2.3                           | 2.0             |
| 160.0       | 122.2                                                                                                                            | 116.5              | 128.0              | 4.7                     | 2.4                           | 2.0             |
| 165.0       | 110.9                                                                                                                            | 105.5              | 116.2              | 4.8                     | 2.5                           | 1.9             |
| 170.0       | 100.8                                                                                                                            | 95.86              | 105.7              | 4.9                     | 2.6                           | 1.9             |
| 175.0       | 91.82                                                                                                                            | 87.24              | 96.40              | 5.0                     | 2.7                           | 1.8             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0502F000</b> |                                                                                                                       |                      |                      |                                      |         |         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8402                                                                                                                  |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3450 K, R <sub>25</sub> = 5000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                  | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 180.0                  | 83.81                                                                                                                 | 79.55                | 88.06                | 5.1                                  | 2.8     | 1.8     |
| 185.0                  | 76.64                                                                                                                 | 72.68                | 80.60                | 5.2                                  | 2.9     | 1.8     |
| 190.0                  | 70.21                                                                                                                 | 66.53                | 73.90                | 5.3                                  | 3.0     | 1.7     |
| 195.0                  | 64.44                                                                                                                 | 61.00                | 67.88                | 5.3                                  | 3.1     | 1.7     |
| 200.0                  | 59.25                                                                                                                 | 56.04                | 62.46                | 5.4                                  | 3.3     | 1.7     |
| 205.0                  | 54.56                                                                                                                 | 51.56                | 57.56                | 5.5                                  | 3.4     | 1.6     |
| 210.0                  | 50.33                                                                                                                 | 47.53                | 53.14                | 5.6                                  | 3.5     | 1.6     |
| 215.0                  | 46.51                                                                                                                 | 43.88                | 49.14                | 5.7                                  | 3.6     | 1.6     |
| 220.0                  | 43.04                                                                                                                 | 40.57                | 45.50                | 5.7                                  | 3.7     | 1.5     |
| 225.0                  | 39.89                                                                                                                 | 37.57                | 42.20                | 5.8                                  | 3.9     | 1.5     |
| 230.0                  | 37.02                                                                                                                 | 34.85                | 39.20                | 5.9                                  | 4.0     | 1.5     |
| 235.0                  | 34.42                                                                                                                 | 32.37                | 36.46                | 5.9                                  | 4.1     | 1.4     |
| 240.0                  | 32.04                                                                                                                 | 30.11                | 33.97                | 6.0                                  | 4.2     | 1.4     |
| 245.0                  | 29.86                                                                                                                 | 28.05                | 31.68                | 6.1                                  | 4.4     | 1.4     |
| 250.0                  | 27.88                                                                                                                 | 26.16                | 29.59                | 6.2                                  | 4.5     | 1.4     |
| 255.0                  | 26.05                                                                                                                 | 24.43                | 27.67                | 6.2                                  | 4.6     | 1.3     |
| 260.0                  | 24.38                                                                                                                 | 22.85                | 25.91                | 6.3                                  | 4.8     | 1.3     |
| 265.0                  | 22.85                                                                                                                 | 21.40                | 24.30                | 6.3                                  | 4.9     | 1.3     |
| 270.0                  | 21.43                                                                                                                 | 20.06                | 22.81                | 6.4                                  | 5.1     | 1.3     |
| 275.0                  | 20.13                                                                                                                 | 18.83                | 21.43                | 6.5                                  | 5.2     | 1.2     |
| 280.0                  | 18.93                                                                                                                 | 17.69                | 20.17                | 6.5                                  | 5.4     | 1.2     |
| 285.0                  | 17.82                                                                                                                 | 16.65                | 19.00                | 6.6                                  | 5.5     | 1.2     |
| 290.0                  | 16.80                                                                                                                 | 15.68                | 17.91                | 6.7                                  | 5.7     | 1.2     |
| 295.0                  | 15.85                                                                                                                 | 14.79                | 16.91                | 6.7                                  | 5.8     | 1.2     |
| 300.0                  | 14.97                                                                                                                 | 13.96                | 15.98                | 6.8                                  | 6.0     | 1.1     |

| <b>B57560G0502G000</b> |                                                                                                                       |                      |                      |                                      |         |         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8402                                                                                                                  |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3450 K, R <sub>25</sub> = 5000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                  | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| -55.0                  | 259960                                                                                                                | 243260               | 276650               | 6.4                                  | 1.0     | 6.4     |
| -50.0                  | 189950                                                                                                                | 178460               | 201430               | 6.0                                  | 1.0     | 6.2     |
| -45.0                  | 140350                                                                                                                | 132370               | 148330               | 5.7                                  | 1.0     | 5.9     |
| -40.0                  | 104800                                                                                                                | 99201                | 110400               | 5.3                                  | 0.9     | 5.7     |
| -35.0                  | 79044                                                                                                                 | 75078                | 83010                | 5.0                                  | 0.9     | 5.5     |
| -30.0                  | 60186                                                                                                                 | 57354                | 63018                | 4.7                                  | 0.9     | 5.4     |
| -25.0                  | 46242                                                                                                                 | 44204                | 48279                | 4.4                                  | 0.8     | 5.2     |
| -20.0                  | 35834                                                                                                                 | 34358                | 37310                | 4.1                                  | 0.8     | 5.0     |
| -15.0                  | 27996                                                                                                                 | 26920                | 29073                | 3.8                                  | 0.8     | 4.9     |

|         | B57560G0502G000                                                                                                                  |                           |                           |                         |                               |                                |
|---------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8402                                                                                                                             |                           |                           |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                           |                           |                         |                               |                                |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                        | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| -10.0   | 22043                                                                                                                            | 21254                     | 22833                     | 3.6                     | 0.8                           | 4.7                            |
| -5.0    | 17485                                                                                                                            | 16903                     | 18067                     | 3.3                     | 0.7                           | 4.6                            |
| 0.0     | 13968                                                                                                                            | 13537                     | 14399                     | 3.1                     | 0.7                           | 4.4                            |
| 5.0     | 11234                                                                                                                            | 10914                     | 11554                     | 2.9                     | 0.7                           | 4.3                            |
| 10.0    | 9094                                                                                                                             | 8855                      | 9332                      | 2.6                     | 0.6                           | 4.2                            |
| 15.0    | 7407                                                                                                                             | 7228                      | 7585                      | 2.4                     | 0.6                           | 4.0                            |
| 20.0    | 6068                                                                                                                             | 5935                      | 6202                      | 2.2                     | 0.6                           | 3.9                            |
| 25.0    | 5000                                                                                                                             | 4900                      | 5100                      | 2.0                     | 0.5                           | 3.8                            |
| 30.0    | 4142                                                                                                                             | 4051                      | 4233                      | 2.2                     | 0.6                           | 3.7                            |
| 35.0    | 3450                                                                                                                             | 3367                      | 3532                      | 2.4                     | 0.7                           | 3.6                            |
| 40.0    | 2887                                                                                                                             | 2813                      | 2961                      | 2.6                     | 0.7                           | 3.5                            |
| 45.0    | 2428                                                                                                                             | 2361                      | 2495                      | 2.7                     | 0.8                           | 3.4                            |
| 50.0    | 2051                                                                                                                             | 1991                      | 2111                      | 2.9                     | 0.9                           | 3.3                            |
| 55.0    | 1741                                                                                                                             | 1687                      | 1795                      | 3.1                     | 1.0                           | 3.2                            |
| 60.0    | 1484                                                                                                                             | 1435                      | 1532                      | 3.2                     | 1.0                           | 3.2                            |
| 65.0    | 1270                                                                                                                             | 1226                      | 1313                      | 3.4                     | 1.1                           | 3.1                            |
| 70.0    | 1091                                                                                                                             | 1052                      | 1130                      | 3.6                     | 1.2                           | 3.0                            |
| 75.0    | 940.8                                                                                                                            | 905.9                     | 975.7                     | 3.7                     | 1.3                           | 2.9                            |
| 80.0    | 814.4                                                                                                                            | 783.0                     | 845.8                     | 3.9                     | 1.4                           | 2.8                            |
| 85.0    | 707.5                                                                                                                            | 679.2                     | 735.8                     | 4.0                     | 1.4                           | 2.8                            |
| 90.0    | 616.8                                                                                                                            | 591.3                     | 642.3                     | 4.1                     | 1.5                           | 2.7                            |
| 95.0    | 539.4                                                                                                                            | 516.4                     | 562.4                     | 4.3                     | 1.6                           | 2.6                            |
| 100.0   | 473.3                                                                                                                            | 452.5                     | 494.1                     | 4.4                     | 1.7                           | 2.6                            |
| 105.0   | 416.6                                                                                                                            | 397.7                     | 435.4                     | 4.5                     | 1.8                           | 2.5                            |
| 110.0   | 367.7                                                                                                                            | 350.6                     | 384.8                     | 4.7                     | 1.9                           | 2.5                            |
| 115.0   | 325.6                                                                                                                            | 310.0                     | 341.1                     | 4.8                     | 2.0                           | 2.4                            |
| 120.0   | 289.0                                                                                                                            | 274.9                     | 303.2                     | 4.9                     | 2.1                           | 2.4                            |
| 125.0   | 257.3                                                                                                                            | 244.4                     | 270.2                     | 5.0                     | 2.2                           | 2.3                            |
| 130.0   | 229.7                                                                                                                            | 217.9                     | 241.4                     | 5.1                     | 2.3                           | 2.2                            |
| 135.0   | 205.5                                                                                                                            | 194.8                     | 216.3                     | 5.2                     | 2.4                           | 2.2                            |
| 140.0   | 184.4                                                                                                                            | 174.5                     | 194.2                     | 5.3                     | 2.5                           | 2.1                            |
| 145.0   | 165.8                                                                                                                            | 156.8                     | 174.8                     | 5.4                     | 2.6                           | 2.1                            |
| 150.0   | 149.4                                                                                                                            | 141.1                     | 157.7                     | 5.5                     | 2.7                           | 2.1                            |
| 155.0   | 135.0                                                                                                                            | 127.4                     | 142.6                     | 5.6                     | 2.8                           | 2.0                            |
| 160.0   | 122.2                                                                                                                            | 115.2                     | 129.2                     | 5.7                     | 2.9                           | 2.0                            |
| 165.0   | 110.9                                                                                                                            | 104.4                     | 117.4                     | 5.8                     | 3.0                           | 1.9                            |
| 170.0   | 100.8                                                                                                                            | 94.82                     | 106.8                     | 5.9                     | 3.1                           | 1.9                            |
| 175.0   | 91.82                                                                                                                            | 86.29                     | 97.36                     | 6.0                     | 3.3                           | 1.8                            |
| 180.0   | 83.81                                                                                                                            | 78.68                     | 88.94                     | 6.1                     | 3.4                           | 1.8                            |
| 185.0   | 76.64                                                                                                                            | 71.88                     | 81.40                     | 6.2                     | 3.5                           | 1.8                            |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

|         | <b>B57560G0502G000</b>                                                                                     |                   |                   |                         |                          |                        |
|---------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|------------------------|
| R/T No. | 8402                                                                                                       |                   |                   |                         |                          |                        |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 2\%$ |                   |                   |                         |                          |                        |
|         | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (%/K)}$ |
| 190.0   | 70.21                                                                                                      | 65.80             | 74.63             | 6.3                     | 3.6                      | 1.7                    |
| 195.0   | 64.44                                                                                                      | 60.33             | 68.55             | 6.4                     | 3.8                      | 1.7                    |
| 200.0   | 59.25                                                                                                      | 55.42             | 63.07             | 6.5                     | 3.9                      | 1.7                    |
| 205.0   | 54.56                                                                                                      | 50.99             | 58.13             | 6.5                     | 4.0                      | 1.6                    |
| 210.0   | 50.33                                                                                                      | 47.00             | 53.67             | 6.6                     | 4.1                      | 1.6                    |
| 215.0   | 46.51                                                                                                      | 43.39             | 49.62             | 6.7                     | 4.3                      | 1.6                    |
| 220.0   | 43.04                                                                                                      | 40.12             | 45.95             | 6.8                     | 4.4                      | 1.5                    |
| 225.0   | 39.89                                                                                                      | 37.16             | 42.62             | 6.9                     | 4.6                      | 1.5                    |
| 230.0   | 37.02                                                                                                      | 34.46             | 39.59             | 6.9                     | 4.7                      | 1.5                    |
| 235.0   | 34.42                                                                                                      | 32.01             | 36.82             | 7.0                     | 4.8                      | 1.4                    |
| 240.0   | 32.04                                                                                                      | 29.77             | 34.30             | 7.1                     | 5.0                      | 1.4                    |
| 245.0   | 29.86                                                                                                      | 27.73             | 32.00             | 7.1                     | 5.1                      | 1.4                    |
| 250.0   | 27.88                                                                                                      | 25.87             | 29.88             | 7.2                     | 5.3                      | 1.4                    |
| 255.0   | 26.05                                                                                                      | 24.16             | 27.95             | 7.3                     | 5.4                      | 1.3                    |
| 260.0   | 24.38                                                                                                      | 22.59             | 26.17             | 7.3                     | 5.6                      | 1.3                    |
| 265.0   | 22.85                                                                                                      | 21.15             | 24.54             | 7.4                     | 5.7                      | 1.3                    |
| 270.0   | 21.43                                                                                                      | 19.83             | 23.03             | 7.5                     | 5.9                      | 1.3                    |
| 275.0   | 20.13                                                                                                      | 18.62             | 21.65             | 7.5                     | 6.1                      | 1.2                    |
| 280.0   | 18.93                                                                                                      | 17.49             | 20.37             | 7.6                     | 6.2                      | 1.2                    |
| 285.0   | 17.82                                                                                                      | 16.46             | 19.19             | 7.6                     | 6.4                      | 1.2                    |
| 290.0   | 16.80                                                                                                      | 15.50             | 18.09             | 7.7                     | 6.6                      | 1.2                    |
| 295.0   | 15.85                                                                                                      | 14.62             | 17.08             | 7.8                     | 6.7                      | 1.2                    |
| 300.0   | 14.97                                                                                                      | 13.80             | 16.14             | 7.8                     | 6.9                      | 1.1                    |

|         | <b>B57560G0502H000</b>                                                                                     |                   |                   |                         |                          |                        |
|---------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|------------------------|
| R/T No. | 8402                                                                                                       |                   |                   |                         |                          |                        |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                   |                   |                         |                          |                        |
|         | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (%/K)}$ |
| −55.0   | 259960                                                                                                     | 240550            | 279360            | 7.5                     | 1.2                      | 6.4                    |
| −50.0   | 189950                                                                                                     | 176490            | 203400            | 7.1                     | 1.1                      | 6.2                    |
| −45.0   | 140350                                                                                                     | 130910            | 149780            | 6.7                     | 1.1                      | 5.9                    |
| −40.0   | 104800                                                                                                     | 98118             | 111480            | 6.4                     | 1.1                      | 5.7                    |
| −35.0   | 79044                                                                                                      | 74264             | 83824             | 6.0                     | 1.1                      | 5.5                    |
| −30.0   | 60186                                                                                                      | 56736             | 63636             | 5.7                     | 1.1                      | 5.4                    |
| −25.0   | 46242                                                                                                      | 43731             | 48753             | 5.4                     | 1.0                      | 5.2                    |
| −20.0   | 35834                                                                                                      | 33992             | 37676             | 5.1                     | 1.0                      | 5.0                    |
| −15.0   | 27996                                                                                                      | 26635             | 29358             | 4.9                     | 1.0                      | 4.9                    |
| −10.0   | 22043                                                                                                      | 21030             | 23057             | 4.6                     | 1.0                      | 4.7                    |
| −5.0    | 17485                                                                                                      | 16726             | 18245             | 4.3                     | 1.0                      | 4.6                    |

|             | B57560G0502H000                                                                                                                  |                    |                    |                         |                               |                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.     | 8402                                                                                                                             |                    |                    |                         |                               |                 |
| T (°C)      | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                    |                    |                         |                               |                 |
|             | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 0.0         | 13968                                                                                                                            | 13396              | 14540              | 4.1                     | 0.9                           | 4.4             |
| 5.0         | 11234                                                                                                                            | 10800              | 11668              | 3.9                     | 0.9                           | 4.3             |
| 10.0        | 9094                                                                                                                             | 8763               | 9424               | 3.6                     | 0.9                           | 4.2             |
| 15.0        | 7407                                                                                                                             | 7154               | 7659               | 3.4                     | 0.8                           | 4.0             |
| 20.0        | 6068                                                                                                                             | 5874               | 6263               | 3.2                     | 0.8                           | 3.9             |
| <b>25.0</b> | <b>5000</b>                                                                                                                      | <b>4850</b>        | <b>5150</b>        | <b>3.0</b>              | <b>0.8</b>                    | <b>3.8</b>      |
| 30.0        | 4142                                                                                                                             | 4010               | 4275               | 3.2                     | 0.9                           | 3.7             |
| 35.0        | 3450                                                                                                                             | 3333               | 3566               | 3.4                     | 0.9                           | 3.6             |
| 40.0        | 2887                                                                                                                             | 2784               | 2990               | 3.6                     | 1.0                           | 3.5             |
| 45.0        | 2428                                                                                                                             | 2337               | 2519               | 3.8                     | 1.1                           | 3.4             |
| 50.0        | 2051                                                                                                                             | 1971               | 2132               | 3.9                     | 1.2                           | 3.3             |
| 55.0        | 1741                                                                                                                             | 1670               | 1812               | 4.1                     | 1.3                           | 3.2             |
| 60.0        | 1484                                                                                                                             | 1420               | 1547               | 4.3                     | 1.3                           | 3.2             |
| 65.0        | 1270                                                                                                                             | 1214               | 1326               | 4.4                     | 1.4                           | 3.1             |
| 70.0        | 1091                                                                                                                             | 1041               | 1141               | 4.6                     | 1.5                           | 3.0             |
| 75.0        | 940.8                                                                                                                            | 896.4              | 985.3              | 4.7                     | 1.6                           | 2.9             |
| 80.0        | 814.4                                                                                                                            | 774.7              | 854.1              | 4.9                     | 1.7                           | 2.8             |
| 85.0        | 707.5                                                                                                                            | 672.0              | 743.0              | 5.0                     | 1.8                           | 2.8             |
| 90.0        | 616.8                                                                                                                            | 585.0              | 648.5              | 5.2                     | 1.9                           | 2.7             |
| 95.0        | 539.4                                                                                                                            | 510.9              | 568.0              | 5.3                     | 2.0                           | 2.6             |
| 100.0       | 473.3                                                                                                                            | 447.6              | 499.0              | 5.4                     | 2.1                           | 2.6             |
| 105.0       | 416.6                                                                                                                            | 393.4              | 439.7              | 5.6                     | 2.2                           | 2.5             |
| 110.0       | 367.7                                                                                                                            | 346.9              | 388.6              | 5.7                     | 2.3                           | 2.5             |
| 115.0       | 325.6                                                                                                                            | 306.7              | 344.5              | 5.8                     | 2.4                           | 2.4             |
| 120.0       | 289.0                                                                                                                            | 271.9              | 306.2              | 5.9                     | 2.5                           | 2.4             |
| 125.0       | 257.3                                                                                                                            | 241.8              | 272.9              | 6.0                     | 2.6                           | 2.3             |
| 130.0       | 229.7                                                                                                                            | 215.6              | 243.8              | 6.2                     | 2.7                           | 2.2             |
| 135.0       | 205.5                                                                                                                            | 192.7              | 218.4              | 6.3                     | 2.9                           | 2.2             |
| 140.0       | 184.4                                                                                                                            | 172.6              | 196.1              | 6.4                     | 3.0                           | 2.1             |
| 145.0       | 165.8                                                                                                                            | 155.1              | 176.5              | 6.5                     | 3.1                           | 2.1             |
| 150.0       | 149.4                                                                                                                            | 139.6              | 159.3              | 6.6                     | 3.2                           | 2.1             |
| 155.0       | 135.0                                                                                                                            | 126.0              | 144.0              | 6.7                     | 3.3                           | 2.0             |
| 160.0       | 122.2                                                                                                                            | 113.9              | 130.5              | 6.8                     | 3.4                           | 2.0             |
| 165.0       | 110.9                                                                                                                            | 103.2              | 118.5              | 6.9                     | 3.6                           | 1.9             |
| 170.0       | 100.8                                                                                                                            | 93.77              | 107.8              | 7.0                     | 3.7                           | 1.9             |
| 175.0       | 91.82                                                                                                                            | 85.33              | 98.31              | 7.1                     | 3.8                           | 1.8             |
| 180.0       | 83.81                                                                                                                            | 77.81              | 89.81              | 7.2                     | 4.0                           | 1.8             |
| 185.0       | 76.64                                                                                                                            | 71.09              | 82.19              | 7.2                     | 4.1                           | 1.8             |
| 190.0       | 70.21                                                                                                                            | 65.06              | 75.36              | 7.3                     | 4.2                           | 1.7             |
| 195.0       | 64.44                                                                                                                            | 59.66              | 69.22              | 7.4                     | 4.4                           | 1.7             |



|         | <b>B57560G0502H000</b>                                                                                     |                   |                   |                         |                               |                                |
|---------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8402                                                                                                       |                   |                   |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                   |                   |                         |                               |                                |
|         | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 200.0   | 59.25                                                                                                      | 54.80             | 63.69             | 7.5                     | 4.5                           | 1.7                            |
| 205.0   | 54.56                                                                                                      | 50.42             | 58.70             | 7.6                     | 4.7                           | 1.6                            |
| 210.0   | 50.33                                                                                                      | 46.48             | 54.19             | 7.7                     | 4.8                           | 1.6                            |
| 215.0   | 46.51                                                                                                      | 42.90             | 50.11             | 7.7                     | 4.9                           | 1.6                            |
| 220.0   | 43.04                                                                                                      | 39.67             | 46.40             | 7.8                     | 5.1                           | 1.5                            |
| 225.0   | 39.89                                                                                                      | 36.74             | 43.04             | 7.9                     | 5.2                           | 1.5                            |
| 230.0   | 37.02                                                                                                      | 34.07             | 39.98             | 8.0                     | 5.4                           | 1.5                            |
| 235.0   | 34.42                                                                                                      | 31.65             | 37.19             | 8.0                     | 5.6                           | 1.4                            |
| 240.0   | 32.04                                                                                                      | 29.44             | 34.64             | 8.1                     | 5.7                           | 1.4                            |
| 245.0   | 29.86                                                                                                      | 27.42             | 32.31             | 8.2                     | 5.9                           | 1.4                            |
| 250.0   | 27.88                                                                                                      | 25.57             | 30.18             | 8.3                     | 6.0                           | 1.4                            |
| 255.0   | 26.05                                                                                                      | 23.89             | 28.22             | 8.3                     | 6.2                           | 1.3                            |
| 260.0   | 24.38                                                                                                      | 22.34             | 26.43             | 8.4                     | 6.4                           | 1.3                            |
| 265.0   | 22.85                                                                                                      | 20.91             | 24.78             | 8.5                     | 6.6                           | 1.3                            |
| 270.0   | 21.43                                                                                                      | 19.61             | 23.26             | 8.5                     | 6.7                           | 1.3                            |
| 275.0   | 20.13                                                                                                      | 18.40             | 21.86             | 8.6                     | 6.9                           | 1.2                            |
| 280.0   | 18.93                                                                                                      | 17.29             | 20.57             | 8.6                     | 7.1                           | 1.2                            |
| 285.0   | 17.82                                                                                                      | 16.27             | 19.37             | 8.7                     | 7.3                           | 1.2                            |
| 290.0   | 16.80                                                                                                      | 15.33             | 18.27             | 8.8                     | 7.5                           | 1.2                            |
| 295.0   | 15.85                                                                                                      | 14.45             | 17.25             | 8.8                     | 7.7                           | 1.2                            |
| 300.0   | 14.97                                                                                                      | 13.64             | 16.30             | 8.9                     | 7.8                           | 1.1                            |

|         | <b>B57560G0502J000</b>                                                                                     |                   |                   |                         |                               |                                |
|---------|------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8402                                                                                                       |                   |                   |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                   |                   |                         |                               |                                |
|         | $R_{nom}[\Omega]$                                                                                          | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0   | 259960                                                                                                     | 235130            | 284790            | 9.6                     | 1.5                           | 6.4                            |
| −50.0   | 189950                                                                                                     | 172540            | 207350            | 9.2                     | 1.5                           | 6.2                            |
| −45.0   | 140350                                                                                                     | 128010            | 152690            | 8.8                     | 1.5                           | 5.9                            |
| −40.0   | 104800                                                                                                     | 95953             | 113650            | 8.4                     | 1.5                           | 5.7                            |
| −35.0   | 79044                                                                                                      | 72637             | 85452             | 8.1                     | 1.5                           | 5.5                            |
| −30.0   | 60186                                                                                                      | 55501             | 64871             | 7.8                     | 1.5                           | 5.4                            |
| −25.0   | 46242                                                                                                      | 42784             | 49699             | 7.5                     | 1.4                           | 5.2                            |
| −20.0   | 35834                                                                                                      | 33260             | 38408             | 7.2                     | 1.4                           | 5.0                            |
| −15.0   | 27996                                                                                                      | 26065             | 29928             | 6.9                     | 1.4                           | 4.9                            |
| −10.0   | 22043                                                                                                      | 20582             | 23505             | 6.6                     | 1.4                           | 4.7                            |
| −5.0    | 17485                                                                                                      | 16372             | 18599             | 6.4                     | 1.4                           | 4.6                            |
| 0.0     | 13968                                                                                                      | 13114             | 14823             | 6.1                     | 1.4                           | 4.4                            |
| 5.0     | 11234                                                                                                      | 10574             | 11894             | 5.9                     | 1.4                           | 4.3                            |

|             | B57560G0502J000                                                                                                                  |                    |                    |                         |                               |                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.     | 8402                                                                                                                             |                    |                    |                         |                               |                 |
| T (°C)      | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                    |                    |                         |                               |                 |
|             | $R_{nomL}[\Omega]$                                                                                                               | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 10.0        | 9094                                                                                                                             | 8580               | 9607               | 5.6                     | 1.4                           | 4.2             |
| 15.0        | 7407                                                                                                                             | 7005               | 7808               | 5.4                     | 1.3                           | 4.0             |
| 20.0        | 6068                                                                                                                             | 5752               | 6384               | 5.2                     | 1.3                           | 3.9             |
| <b>25.0</b> | <b>5000</b>                                                                                                                      | <b>4750</b>        | <b>5250</b>        | <b>5.0</b>              | <b>1.3</b>                    | <b>3.8</b>      |
| 30.0        | 4142                                                                                                                             | 3927               | 4358               | 5.2                     | 1.4                           | 3.7             |
| 35.0        | 3450                                                                                                                             | 3263               | 3636               | 5.4                     | 1.5                           | 3.6             |
| 40.0        | 2887                                                                                                                             | 2726               | 3048               | 5.6                     | 1.6                           | 3.5             |
| 45.0        | 2428                                                                                                                             | 2288               | 2568               | 5.8                     | 1.7                           | 3.4             |
| 50.0        | 2051                                                                                                                             | 1929               | 2173               | 5.9                     | 1.8                           | 3.3             |
| 55.0        | 1741                                                                                                                             | 1634               | 1847               | 6.1                     | 1.9                           | 3.2             |
| 60.0        | 1484                                                                                                                             | 1390               | 1577               | 6.3                     | 2.0                           | 3.2             |
| 65.0        | 1270                                                                                                                             | 1188               | 1352               | 6.4                     | 2.1                           | 3.1             |
| 70.0        | 1091                                                                                                                             | 1019               | 1163               | 6.6                     | 2.2                           | 3.0             |
| 75.0        | 940.8                                                                                                                            | 877.2              | 1004               | 6.8                     | 2.3                           | 2.9             |
| 80.0        | 814.4                                                                                                                            | 758.2              | 870.7              | 6.9                     | 2.4                           | 2.8             |
| 85.0        | 707.5                                                                                                                            | 657.6              | 757.4              | 7.1                     | 2.5                           | 2.8             |
| 90.0        | 616.8                                                                                                                            | 572.4              | 661.1              | 7.2                     | 2.7                           | 2.7             |
| 95.0        | 539.4                                                                                                                            | 499.8              | 579.0              | 7.3                     | 2.8                           | 2.6             |
| 100.0       | 473.3                                                                                                                            | 437.9              | 508.7              | 7.5                     | 2.9                           | 2.6             |
| 105.0       | 416.6                                                                                                                            | 384.9              | 448.2              | 7.6                     | 3.0                           | 2.5             |
| 110.0       | 367.7                                                                                                                            | 339.3              | 396.2              | 7.7                     | 3.1                           | 2.5             |
| 115.0       | 325.6                                                                                                                            | 300.0              | 351.1              | 7.9                     | 3.3                           | 2.4             |
| 120.0       | 289.0                                                                                                                            | 266.0              | 312.1              | 8.0                     | 3.4                           | 2.4             |
| 125.0       | 257.3                                                                                                                            | 236.5              | 278.2              | 8.1                     | 3.5                           | 2.3             |
| 130.0       | 229.7                                                                                                                            | 210.8              | 248.5              | 8.2                     | 3.7                           | 2.2             |
| 135.0       | 205.5                                                                                                                            | 188.4              | 222.6              | 8.3                     | 3.8                           | 2.2             |
| 140.0       | 184.4                                                                                                                            | 168.8              | 199.9              | 8.4                     | 3.9                           | 2.1             |
| 145.0       | 165.8                                                                                                                            | 151.6              | 180.0              | 8.5                     | 4.1                           | 2.1             |
| 150.0       | 149.4                                                                                                                            | 136.5              | 162.4              | 8.7                     | 4.2                           | 2.1             |
| 155.0       | 135.0                                                                                                                            | 123.2              | 146.8              | 8.8                     | 4.4                           | 2.0             |
| 160.0       | 122.2                                                                                                                            | 111.4              | 133.0              | 8.9                     | 4.5                           | 2.0             |
| 165.0       | 110.9                                                                                                                            | 100.9              | 120.8              | 9.0                     | 4.6                           | 1.9             |
| 170.0       | 100.8                                                                                                                            | 91.67              | 109.9              | 9.1                     | 4.8                           | 1.9             |
| 175.0       | 91.82                                                                                                                            | 83.42              | 100.2              | 9.1                     | 5.0                           | 1.8             |
| 180.0       | 83.81                                                                                                                            | 76.07              | 91.55              | 9.2                     | 5.1                           | 1.8             |
| 185.0       | 76.64                                                                                                                            | 69.49              | 83.79              | 9.3                     | 5.3                           | 1.8             |
| 190.0       | 70.21                                                                                                                            | 63.60              | 76.83              | 9.4                     | 5.4                           | 1.7             |
| 195.0       | 64.44                                                                                                                            | 58.32              | 70.57              | 9.5                     | 5.6                           | 1.7             |
| 200.0       | 59.25                                                                                                                            | 53.56              | 64.93              | 9.6                     | 5.8                           | 1.7             |
| 205.0       | 54.56                                                                                                                            | 49.28              | 59.84              | 9.7                     | 5.9                           | 1.6             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0502J000</b> |                                                                                                            |                          |                          |                         |                          |                        |
|------------------------|------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|--------------------------|------------------------|
| R/T No.                | 8402                                                                                                       |                          |                          |                         |                          |                        |
| T (°C)                 | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 5000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                          |                          |                         |                          |                        |
|                        | $R_{\text{nom}}[\Omega]$                                                                                   | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (%/K)}$ |
| 210.0                  | 50.33                                                                                                      | 45.42                    | 55.24                    | 9.8                     | 6.1                      | 1.6                    |
| 215.0                  | 46.51                                                                                                      | 41.93                    | 51.08                    | 9.8                     | 6.3                      | 1.6                    |
| 220.0                  | 43.04                                                                                                      | 38.77                    | 47.31                    | 9.9                     | 6.5                      | 1.5                    |
| 225.0                  | 39.89                                                                                                      | 35.90                    | 43.87                    | 10.0                    | 6.6                      | 1.5                    |
| 230.0                  | 37.02                                                                                                      | 33.30                    | 40.75                    | 10.1                    | 6.8                      | 1.5                    |
| 235.0                  | 34.42                                                                                                      | 30.93                    | 37.91                    | 10.1                    | 7.0                      | 1.4                    |
| 240.0                  | 32.04                                                                                                      | 28.76                    | 35.31                    | 10.2                    | 7.2                      | 1.4                    |
| 245.0                  | 29.86                                                                                                      | 26.79                    | 32.94                    | 10.3                    | 7.4                      | 1.4                    |
| 250.0                  | 27.88                                                                                                      | 24.99                    | 30.76                    | 10.4                    | 7.6                      | 1.4                    |
| 255.0                  | 26.05                                                                                                      | 23.34                    | 28.77                    | 10.4                    | 7.8                      | 1.3                    |
| 260.0                  | 24.38                                                                                                      | 21.82                    | 26.94                    | 10.5                    | 8.0                      | 1.3                    |
| 265.0                  | 22.85                                                                                                      | 20.43                    | 25.26                    | 10.6                    | 8.2                      | 1.3                    |
| 270.0                  | 21.43                                                                                                      | 19.16                    | 23.71                    | 10.6                    | 8.4                      | 1.3                    |
| 275.0                  | 20.13                                                                                                      | 17.98                    | 22.28                    | 10.7                    | 8.6                      | 1.2                    |
| 280.0                  | 18.93                                                                                                      | 16.90                    | 20.97                    | 10.8                    | 8.8                      | 1.2                    |
| 285.0                  | 17.82                                                                                                      | 15.89                    | 19.75                    | 10.8                    | 9.0                      | 1.2                    |
| 290.0                  | 16.80                                                                                                      | 14.97                    | 18.62                    | 10.9                    | 9.3                      | 1.2                    |
| 295.0                  | 15.85                                                                                                      | 14.12                    | 17.58                    | 10.9                    | 9.5                      | 1.2                    |
| 300.0                  | 14.97                                                                                                      | 13.32                    | 16.61                    | 11.0                    | 9.7                      | 1.1                    |

| <b>B57560G0103F000</b> |                                                                                                             |                          |                          |                         |                          |                        |
|------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|--------------------------|------------------------|
| R/T No.                | 8407                                                                                                        |                          |                          |                         |                          |                        |
| T (°C)                 | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 1\%$ |                          |                          |                         |                          |                        |
|                        | $R_{\text{nom}}[\Omega]$                                                                                    | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (%/K)}$ |
| -55.0                  | 519910                                                                                                      | 491950                   | 547870                   | 5.4                     | 0.8                      | 6.4                    |
| -50.0                  | 379890                                                                                                      | 360880                   | 398910                   | 5.0                     | 0.8                      | 6.2                    |
| -45.0                  | 280700                                                                                                      | 267640                   | 293750                   | 4.7                     | 0.8                      | 5.9                    |
| -40.0                  | 209600                                                                                                      | 200570                   | 218640                   | 4.3                     | 0.8                      | 5.7                    |
| -35.0                  | 158090                                                                                                      | 151780                   | 164390                   | 4.0                     | 0.7                      | 5.5                    |
| -30.0                  | 120370                                                                                                      | 115940                   | 124800                   | 3.7                     | 0.7                      | 5.4                    |
| -25.0                  | 92484                                                                                                       | 89355                    | 95612                    | 3.4                     | 0.7                      | 5.2                    |
| -20.0                  | 71668                                                                                                       | 69447                    | 73889                    | 3.1                     | 0.6                      | 5.0                    |
| -15.0                  | 55993                                                                                                       | 54410                    | 57576                    | 2.8                     | 0.6                      | 4.9                    |
| -10.0                  | 44087                                                                                                       | 42955                    | 45218                    | 2.6                     | 0.5                      | 4.7                    |
| -5.0                   | 34971                                                                                                       | 34161                    | 35780                    | 2.3                     | 0.5                      | 4.6                    |
| 0.0                    | 27936                                                                                                       | 27356                    | 28516                    | 2.1                     | 0.5                      | 4.4                    |
| 5.0                    | 22468                                                                                                       | 22054                    | 22882                    | 1.8                     | 0.4                      | 4.3                    |
| 10.0                   | 18187                                                                                                       | 17892                    | 18482                    | 1.6                     | 0.4                      | 4.2                    |
| 15.0                   | 14813                                                                                                       | 14605                    | 15021                    | 1.4                     | 0.3                      | 4.0                    |

|         | B57560G0103F000                                                                                                                   |                    |                    |                         |                               |                 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No. | 8407                                                                                                                              |                    |                    |                         |                               |                 |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                    |                    |                         |                               |                 |
|         | $R_{nomL}[\Omega]$                                                                                                                | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 20.0    | 12136                                                                                                                             | 11991              | 12282              | 1.2                     | 0.3                           | 3.9             |
| 25.0    | 10000                                                                                                                             | 9900               | 10100              | 1.0                     | 0.3                           | 3.8             |
| 30.0    | 8284                                                                                                                              | 8186               | 8383               | 1.2                     | 0.3                           | 3.7             |
| 35.0    | 6899                                                                                                                              | 6804               | 6994               | 1.4                     | 0.4                           | 3.6             |
| 40.0    | 5774                                                                                                                              | 5684               | 5864               | 1.6                     | 0.4                           | 3.5             |
| 45.0    | 4856                                                                                                                              | 4772               | 4940               | 1.7                     | 0.5                           | 3.4             |
| 50.0    | 4103                                                                                                                              | 4024               | 4181               | 1.9                     | 0.6                           | 3.3             |
| 55.0    | 3482                                                                                                                              | 3409               | 3554               | 2.1                     | 0.6                           | 3.2             |
| 60.0    | 2967                                                                                                                              | 2901               | 3034               | 2.2                     | 0.7                           | 3.2             |
| 65.0    | 2539                                                                                                                              | 2479               | 2600               | 2.4                     | 0.8                           | 3.1             |
| 70.0    | 2182                                                                                                                              | 2126               | 2237               | 2.5                     | 0.8                           | 3.0             |
| 75.0    | 1882                                                                                                                              | 1831               | 1932               | 2.7                     | 0.9                           | 2.9             |
| 80.0    | 1629                                                                                                                              | 1583               | 1675               | 2.8                     | 1.0                           | 2.8             |
| 85.0    | 1415                                                                                                                              | 1373               | 1457               | 3.0                     | 1.1                           | 2.8             |
| 90.0    | 1234                                                                                                                              | 1195               | 1272               | 3.1                     | 1.1                           | 2.7             |
| 95.0    | 1079                                                                                                                              | 1044               | 1114               | 3.2                     | 1.2                           | 2.6             |
| 100.0   | 946.6                                                                                                                             | 914.6              | 978.6              | 3.4                     | 1.3                           | 2.6             |
| 105.0   | 833.1                                                                                                                             | 803.9              | 862.3              | 3.5                     | 1.4                           | 2.5             |
| 110.0   | 735.5                                                                                                                             | 708.8              | 762.1              | 3.6                     | 1.5                           | 2.5             |
| 115.0   | 651.1                                                                                                                             | 626.7              | 675.5              | 3.7                     | 1.6                           | 2.4             |
| 120.0   | 578.1                                                                                                                             | 555.8              | 600.4              | 3.9                     | 1.6                           | 2.4             |
| 125.0   | 514.6                                                                                                                             | 494.2              | 535.1              | 4.0                     | 1.7                           | 2.3             |
| 130.0   | 459.4                                                                                                                             | 440.6              | 478.1              | 4.1                     | 1.8                           | 2.2             |
| 135.0   | 411.1                                                                                                                             | 393.8              | 428.3              | 4.2                     | 1.9                           | 2.2             |
| 140.0   | 368.8                                                                                                                             | 352.9              | 384.6              | 4.3                     | 2.0                           | 2.1             |
| 145.0   | 331.6                                                                                                                             | 317.0              | 346.2              | 4.4                     | 2.1                           | 2.1             |
| 150.0   | 298.9                                                                                                                             | 285.4              | 312.3              | 4.5                     | 2.2                           | 2.1             |
| 155.0   | 270.0                                                                                                                             | 257.5              | 282.4              | 4.6                     | 2.3                           | 2.0             |
| 160.0   | 244.4                                                                                                                             | 232.9              | 255.9              | 4.7                     | 2.4                           | 2.0             |
| 165.0   | 221.7                                                                                                                             | 211.1              | 232.4              | 4.8                     | 2.5                           | 1.9             |
| 170.0   | 201.6                                                                                                                             | 191.7              | 211.5              | 4.9                     | 2.6                           | 1.9             |
| 175.0   | 183.6                                                                                                                             | 174.5              | 192.8              | 5.0                     | 2.7                           | 1.8             |
| 180.0   | 167.6                                                                                                                             | 159.1              | 176.1              | 5.1                     | 2.8                           | 1.8             |
| 185.0   | 153.3                                                                                                                             | 145.4              | 161.2              | 5.2                     | 2.9                           | 1.8             |
| 190.0   | 140.4                                                                                                                             | 133.1              | 147.8              | 5.3                     | 3.0                           | 1.7             |
| 195.0   | 128.9                                                                                                                             | 122.0              | 135.8              | 5.3                     | 3.1                           | 1.7             |
| 200.0   | 118.5                                                                                                                             | 112.1              | 124.9              | 5.4                     | 3.3                           | 1.7             |
| 205.0   | 109.1                                                                                                                             | 103.1              | 115.1              | 5.5                     | 3.4                           | 1.6             |
| 210.0   | 100.7                                                                                                                             | 95.05              | 106.3              | 5.6                     | 3.5                           | 1.6             |
| 215.0   | 93.01                                                                                                                             | 87.76              | 98.27              | 5.7                     | 3.6                           | 1.6             |

|         | <b>B57560G0103F000</b>                                                                                                            |                          |                          |                         |                               |                          |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No. | 8407                                                                                                                              |                          |                          |                         |                               |                          |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                          |                          |                         |                               |                          |
|         | $R_{\text{nom}}[\Omega]$                                                                                                          | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| 220.0   | 86.08                                                                                                                             | 81.14                    | 91.01                    | 5.7                     | 3.7                           | 1.5                      |
| 225.0   | 79.78                                                                                                                             | 75.15                    | 84.41                    | 5.8                     | 3.9                           | 1.5                      |
| 230.0   | 74.05                                                                                                                             | 69.70                    | 78.40                    | 5.9                     | 4.0                           | 1.5                      |
| 235.0   | 68.83                                                                                                                             | 64.74                    | 72.93                    | 5.9                     | 4.1                           | 1.4                      |
| 240.0   | 64.08                                                                                                                             | 60.22                    | 67.93                    | 6.0                     | 4.2                           | 1.4                      |
| 245.0   | 59.73                                                                                                                             | 56.09                    | 63.36                    | 6.1                     | 4.4                           | 1.4                      |
| 250.0   | 55.75                                                                                                                             | 52.32                    | 59.18                    | 6.2                     | 4.5                           | 1.4                      |
| 255.0   | 52.11                                                                                                                             | 48.87                    | 55.35                    | 6.2                     | 4.6                           | 1.3                      |
| 260.0   | 48.76                                                                                                                             | 45.70                    | 51.83                    | 6.3                     | 4.8                           | 1.3                      |
| 265.0   | 45.69                                                                                                                             | 42.79                    | 48.59                    | 6.3                     | 4.9                           | 1.3                      |
| 270.0   | 42.87                                                                                                                             | 40.12                    | 45.61                    | 6.4                     | 5.1                           | 1.3                      |
| 275.0   | 40.26                                                                                                                             | 37.66                    | 42.87                    | 6.5                     | 5.2                           | 1.2                      |
| 280.0   | 37.86                                                                                                                             | 35.39                    | 40.34                    | 6.5                     | 5.4                           | 1.2                      |
| 285.0   | 35.64                                                                                                                             | 33.29                    | 38.00                    | 6.6                     | 5.5                           | 1.2                      |
| 290.0   | 33.59                                                                                                                             | 31.36                    | 35.83                    | 6.7                     | 5.7                           | 1.2                      |
| 295.0   | 31.70                                                                                                                             | 29.57                    | 33.82                    | 6.7                     | 5.8                           | 1.2                      |
| 300.0   | 29.94                                                                                                                             | 27.91                    | 31.96                    | 6.8                     | 6.0                           | 1.1                      |

|             | <b>B57560G0103G000</b>                                                                                                            |                          |                          |                         |                               |                          |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No.     | 8407                                                                                                                              |                          |                          |                         |                               |                          |
| T (°C)      | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                          |                          |                         |                               |                          |
|             | $R_{\text{nom}}[\Omega]$                                                                                                          | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| −55.0       | 519910                                                                                                                            | 486530                   | 553300                   | 6.4                     | 1.0                           | 6.4                      |
| −50.0       | 379890                                                                                                                            | 356930                   | 402860                   | 6.0                     | 1.0                           | 6.2                      |
| −45.0       | 280700                                                                                                                            | 264740                   | 296660                   | 5.7                     | 1.0                           | 5.9                      |
| −40.0       | 209600                                                                                                                            | 198400                   | 220800                   | 5.3                     | 0.9                           | 5.7                      |
| −35.0       | 158090                                                                                                                            | 150160                   | 166020                   | 5.0                     | 0.9                           | 5.5                      |
| −30.0       | 120370                                                                                                                            | 114710                   | 126040                   | 4.7                     | 0.9                           | 5.4                      |
| −25.0       | 92484                                                                                                                             | 88409                    | 96559                    | 4.4                     | 0.8                           | 5.2                      |
| −20.0       | 71668                                                                                                                             | 68716                    | 74621                    | 4.1                     | 0.8                           | 5.0                      |
| −15.0       | 55993                                                                                                                             | 53839                    | 58146                    | 3.8                     | 0.8                           | 4.9                      |
| −10.0       | 44087                                                                                                                             | 42508                    | 45666                    | 3.6                     | 0.8                           | 4.7                      |
| −5.0        | 34971                                                                                                                             | 33806                    | 36135                    | 3.3                     | 0.7                           | 4.6                      |
| 0.0         | 27936                                                                                                                             | 27074                    | 28798                    | 3.1                     | 0.7                           | 4.4                      |
| 5.0         | 22468                                                                                                                             | 21827                    | 23109                    | 2.9                     | 0.7                           | 4.3                      |
| 10.0        | 18187                                                                                                                             | 17709                    | 18665                    | 2.6                     | 0.6                           | 4.2                      |
| 15.0        | 14813                                                                                                                             | 14456                    | 15170                    | 2.4                     | 0.6                           | 4.0                      |
| 20.0        | 12136                                                                                                                             | 11869                    | 12404                    | 2.2                     | 0.6                           | 3.9                      |
| <b>25.0</b> | <b>10000</b>                                                                                                                      | <b>9800</b>              | <b>10200</b>             | <b>2.0</b>              | <b>0.5</b>                    | <b>3.8</b>               |

|         | B57560G0103G000                                                                                             |                    |                    |                         |                               |                                |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8407                                                                                                        |                    |                    |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 2\%$ |                    |                    |                         |                               |                                |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 30.0    | 8284                                                                                                        | 8103               | 8466               | 2.2                     | 0.6                           | 3.7                            |
| 35.0    | 6899                                                                                                        | 6735               | 7064               | 2.4                     | 0.7                           | 3.6                            |
| 40.0    | 5774                                                                                                        | 5626               | 5922               | 2.6                     | 0.7                           | 3.5                            |
| 45.0    | 4856                                                                                                        | 4723               | 4989               | 2.7                     | 0.8                           | 3.4                            |
| 50.0    | 4103                                                                                                        | 3983               | 4222               | 2.9                     | 0.9                           | 3.3                            |
| 55.0    | 3482                                                                                                        | 3374               | 3589               | 3.1                     | 1.0                           | 3.2                            |
| 60.0    | 2967                                                                                                        | 2871               | 3064               | 3.2                     | 1.0                           | 3.2                            |
| 65.0    | 2539                                                                                                        | 2453               | 2626               | 3.4                     | 1.1                           | 3.1                            |
| 70.0    | 2182                                                                                                        | 2104               | 2259               | 3.6                     | 1.2                           | 3.0                            |
| 75.0    | 1882                                                                                                        | 1812               | 1951               | 3.7                     | 1.3                           | 2.9                            |
| 80.0    | 1629                                                                                                        | 1566               | 1692               | 3.9                     | 1.4                           | 2.8                            |
| 85.0    | 1415                                                                                                        | 1358               | 1472               | 4.0                     | 1.4                           | 2.8                            |
| 90.0    | 1234                                                                                                        | 1183               | 1285               | 4.1                     | 1.5                           | 2.7                            |
| 95.0    | 1079                                                                                                        | 1033               | 1125               | 4.3                     | 1.6                           | 2.6                            |
| 100.0   | 946.6                                                                                                       | 904.9              | 988.2              | 4.4                     | 1.7                           | 2.6                            |
| 105.0   | 833.1                                                                                                       | 795.4              | 870.9              | 4.5                     | 1.8                           | 2.5                            |
| 110.0   | 735.5                                                                                                       | 701.3              | 769.7              | 4.7                     | 1.9                           | 2.5                            |
| 115.0   | 651.1                                                                                                       | 620.1              | 682.2              | 4.8                     | 2.0                           | 2.4                            |
| 120.0   | 578.1                                                                                                       | 549.8              | 606.4              | 4.9                     | 2.1                           | 2.4                            |
| 125.0   | 514.6                                                                                                       | 488.9              | 540.4              | 5.0                     | 2.2                           | 2.3                            |
| 130.0   | 459.4                                                                                                       | 435.8              | 482.9              | 5.1                     | 2.3                           | 2.2                            |
| 135.0   | 411.1                                                                                                       | 389.6              | 432.6              | 5.2                     | 2.4                           | 2.2                            |
| 140.0   | 368.8                                                                                                       | 349.1              | 388.4              | 5.3                     | 2.5                           | 2.1                            |
| 145.0   | 331.6                                                                                                       | 313.5              | 349.6              | 5.4                     | 2.6                           | 2.1                            |
| 150.0   | 298.9                                                                                                       | 282.3              | 315.4              | 5.5                     | 2.7                           | 2.1                            |
| 155.0   | 270.0                                                                                                       | 254.7              | 285.2              | 5.6                     | 2.8                           | 2.0                            |
| 160.0   | 244.4                                                                                                       | 230.4              | 258.5              | 5.7                     | 2.9                           | 2.0                            |
| 165.0   | 221.7                                                                                                       | 208.8              | 234.7              | 5.8                     | 3.0                           | 1.9                            |
| 170.0   | 201.6                                                                                                       | 189.6              | 213.6              | 5.9                     | 3.1                           | 1.9                            |
| 175.0   | 183.6                                                                                                       | 172.6              | 194.7              | 6.0                     | 3.3                           | 1.8                            |
| 180.0   | 167.6                                                                                                       | 157.4              | 177.9              | 6.1                     | 3.4                           | 1.8                            |
| 185.0   | 153.3                                                                                                       | 143.8              | 162.8              | 6.2                     | 3.5                           | 1.8                            |
| 190.0   | 140.4                                                                                                       | 131.6              | 149.3              | 6.3                     | 3.6                           | 1.7                            |
| 195.0   | 128.9                                                                                                       | 120.7              | 137.1              | 6.4                     | 3.8                           | 1.7                            |
| 200.0   | 118.5                                                                                                       | 110.8              | 126.1              | 6.5                     | 3.9                           | 1.7                            |
| 205.0   | 109.1                                                                                                       | 102.0              | 116.3              | 6.5                     | 4.0                           | 1.6                            |
| 210.0   | 100.7                                                                                                       | 94.00              | 107.3              | 6.6                     | 4.1                           | 1.6                            |
| 215.0   | 93.01                                                                                                       | 86.78              | 99.24              | 6.7                     | 4.3                           | 1.6                            |
| 220.0   | 86.08                                                                                                       | 80.24              | 91.91              | 6.8                     | 4.4                           | 1.5                            |
| 225.0   | 79.78                                                                                                       | 74.31              | 85.24              | 6.9                     | 4.6                           | 1.5                            |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

|         | <b>B57560G0103G000</b>                                                                                                            |                          |                          |                         |                               |                          |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No. | 8407                                                                                                                              |                          |                          |                         |                               |                          |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                          |                          |                         |                               |                          |
|         | $R_{\text{nom}}[\Omega]$                                                                                                          | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| 230.0   | 74.05                                                                                                                             | 68.92                    | 79.18                    | 6.9                     | 4.7                           | 1.5                      |
| 235.0   | 68.83                                                                                                                             | 64.02                    | 73.65                    | 7.0                     | 4.8                           | 1.4                      |
| 240.0   | 64.08                                                                                                                             | 59.55                    | 68.60                    | 7.1                     | 5.0                           | 1.4                      |
| 245.0   | 59.73                                                                                                                             | 55.47                    | 63.99                    | 7.1                     | 5.1                           | 1.4                      |
| 250.0   | 55.75                                                                                                                             | 51.73                    | 59.77                    | 7.2                     | 5.3                           | 1.4                      |
| 255.0   | 52.11                                                                                                                             | 48.32                    | 55.90                    | 7.3                     | 5.4                           | 1.3                      |
| 260.0   | 48.76                                                                                                                             | 45.19                    | 52.34                    | 7.3                     | 5.6                           | 1.3                      |
| 265.0   | 45.69                                                                                                                             | 42.31                    | 49.07                    | 7.4                     | 5.7                           | 1.3                      |
| 270.0   | 42.87                                                                                                                             | 39.67                    | 46.07                    | 7.5                     | 5.9                           | 1.3                      |
| 275.0   | 40.26                                                                                                                             | 37.23                    | 43.29                    | 7.5                     | 6.1                           | 1.2                      |
| 280.0   | 37.86                                                                                                                             | 34.99                    | 40.74                    | 7.6                     | 6.2                           | 1.2                      |
| 285.0   | 35.64                                                                                                                             | 32.92                    | 38.37                    | 7.6                     | 6.4                           | 1.2                      |
| 290.0   | 33.59                                                                                                                             | 31.01                    | 36.18                    | 7.7                     | 6.6                           | 1.2                      |
| 295.0   | 31.70                                                                                                                             | 29.24                    | 34.16                    | 7.8                     | 6.7                           | 1.2                      |
| 300.0   | 29.94                                                                                                                             | 27.60                    | 32.28                    | 7.8                     | 6.9                           | 1.1                      |

|             | <b>B57560G0103H000</b>                                                                                                            |                          |                          |                         |                               |                          |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No.     | 8407                                                                                                                              |                          |                          |                         |                               |                          |
| T (°C)      | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                          |                          |                         |                               |                          |
|             | $R_{\text{nom}}[\Omega]$                                                                                                          | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| −55.0       | 519910                                                                                                                            | 481100                   | 558720                   | 7.5                     | 1.2                           | 6.4                      |
| −50.0       | 379890                                                                                                                            | 352980                   | 406810                   | 7.1                     | 1.1                           | 6.2                      |
| −45.0       | 280700                                                                                                                            | 261830                   | 299570                   | 6.7                     | 1.1                           | 5.9                      |
| −40.0       | 209600                                                                                                                            | 196240                   | 222970                   | 6.4                     | 1.1                           | 5.7                      |
| −35.0       | 158090                                                                                                                            | 148530                   | 167650                   | 6.0                     | 1.1                           | 5.5                      |
| −30.0       | 120370                                                                                                                            | 113470                   | 127270                   | 5.7                     | 1.1                           | 5.4                      |
| −25.0       | 92484                                                                                                                             | 87462                    | 97505                    | 5.4                     | 1.0                           | 5.2                      |
| −20.0       | 71668                                                                                                                             | 67984                    | 75352                    | 5.1                     | 1.0                           | 5.0                      |
| −15.0       | 55993                                                                                                                             | 53269                    | 58716                    | 4.9                     | 1.0                           | 4.9                      |
| −10.0       | 44087                                                                                                                             | 42060                    | 46114                    | 4.6                     | 1.0                           | 4.7                      |
| −5.0        | 34971                                                                                                                             | 33452                    | 36489                    | 4.3                     | 1.0                           | 4.6                      |
| 0.0         | 27936                                                                                                                             | 26792                    | 29081                    | 4.1                     | 0.9                           | 4.4                      |
| 5.0         | 22468                                                                                                                             | 21601                    | 23335                    | 3.9                     | 0.9                           | 4.3                      |
| 10.0        | 18187                                                                                                                             | 17526                    | 18848                    | 3.6                     | 0.9                           | 4.2                      |
| 15.0        | 14813                                                                                                                             | 14307                    | 15319                    | 3.4                     | 0.8                           | 4.0                      |
| 20.0        | 12136                                                                                                                             | 11748                    | 12525                    | 3.2                     | 0.8                           | 3.9                      |
| <b>25.0</b> | <b>10000</b>                                                                                                                      | <b>9700</b>              | <b>10300</b>             | <b>3.0</b>              | <b>0.8</b>                    | <b>3.8</b>               |
| 30.0        | 8284                                                                                                                              | 8020                     | 8549                     | 3.2                     | 0.9                           | 3.7                      |
| 35.0        | 6899                                                                                                                              | 6665                     | 7133                     | 3.4                     | 0.9                           | 3.6                      |

|         | B57560G0103H000                                                                                             |                    |                    |                         |                               |                                |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8407                                                                                                        |                    |                    |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                    |                    |                         |                               |                                |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 40.0    | 5774                                                                                                        | 5568               | 5980               | 3.6                     | 1.0                           | 3.5                            |
| 45.0    | 4856                                                                                                        | 4674               | 5038               | 3.8                     | 1.1                           | 3.4                            |
| 50.0    | 4103                                                                                                        | 3942               | 4264               | 3.9                     | 1.2                           | 3.3                            |
| 55.0    | 3482                                                                                                        | 3339               | 3624               | 4.1                     | 1.3                           | 3.2                            |
| 60.0    | 2967                                                                                                        | 2841               | 3094               | 4.3                     | 1.3                           | 3.2                            |
| 65.0    | 2539                                                                                                        | 2427               | 2652               | 4.4                     | 1.4                           | 3.1                            |
| 70.0    | 2182                                                                                                        | 2082               | 2282               | 4.6                     | 1.5                           | 3.0                            |
| 75.0    | 1882                                                                                                        | 1793               | 1971               | 4.7                     | 1.6                           | 2.9                            |
| 80.0    | 1629                                                                                                        | 1549               | 1708               | 4.9                     | 1.7                           | 2.8                            |
| 85.0    | 1415                                                                                                        | 1344               | 1486               | 5.0                     | 1.8                           | 2.8                            |
| 90.0    | 1234                                                                                                        | 1170               | 1297               | 5.2                     | 1.9                           | 2.7                            |
| 95.0    | 1079                                                                                                        | 1022               | 1136               | 5.3                     | 2.0                           | 2.6                            |
| 100.0   | 946.6                                                                                                       | 895.3              | 997.9              | 5.4                     | 2.1                           | 2.6                            |
| 105.0   | 833.1                                                                                                       | 786.9              | 879.4              | 5.6                     | 2.2                           | 2.5                            |
| 110.0   | 735.5                                                                                                       | 693.7              | 777.2              | 5.7                     | 2.3                           | 2.5                            |
| 115.0   | 651.1                                                                                                       | 613.4              | 688.9              | 5.8                     | 2.4                           | 2.4                            |
| 120.0   | 578.1                                                                                                       | 543.9              | 612.3              | 5.9                     | 2.5                           | 2.4                            |
| 125.0   | 514.6                                                                                                       | 483.6              | 545.7              | 6.0                     | 2.6                           | 2.3                            |
| 130.0   | 459.4                                                                                                       | 431.1              | 487.6              | 6.2                     | 2.7                           | 2.2                            |
| 135.0   | 411.1                                                                                                       | 385.3              | 436.8              | 6.3                     | 2.9                           | 2.2                            |
| 140.0   | 368.8                                                                                                       | 345.3              | 392.2              | 6.4                     | 3.0                           | 2.1                            |
| 145.0   | 331.6                                                                                                       | 310.1              | 353.1              | 6.5                     | 3.1                           | 2.1                            |
| 150.0   | 298.9                                                                                                       | 279.2              | 318.5              | 6.6                     | 3.2                           | 2.1                            |
| 155.0   | 270.0                                                                                                       | 251.9              | 288.0              | 6.7                     | 3.3                           | 2.0                            |
| 160.0   | 244.4                                                                                                       | 227.8              | 261.0              | 6.8                     | 3.4                           | 2.0                            |
| 165.0   | 221.7                                                                                                       | 206.5              | 237.0              | 6.9                     | 3.6                           | 1.9                            |
| 170.0   | 201.6                                                                                                       | 187.5              | 215.7              | 7.0                     | 3.7                           | 1.9                            |
| 175.0   | 183.6                                                                                                       | 170.7              | 196.6              | 7.1                     | 3.8                           | 1.8                            |
| 180.0   | 167.6                                                                                                       | 155.6              | 179.6              | 7.2                     | 4.0                           | 1.8                            |
| 185.0   | 153.3                                                                                                       | 142.2              | 164.4              | 7.2                     | 4.1                           | 1.8                            |
| 190.0   | 140.4                                                                                                       | 130.1              | 150.7              | 7.3                     | 4.2                           | 1.7                            |
| 195.0   | 128.9                                                                                                       | 119.3              | 138.4              | 7.4                     | 4.4                           | 1.7                            |
| 200.0   | 118.5                                                                                                       | 109.6              | 127.4              | 7.5                     | 4.5                           | 1.7                            |
| 205.0   | 109.1                                                                                                       | 100.8              | 117.4              | 7.6                     | 4.7                           | 1.6                            |
| 210.0   | 100.7                                                                                                       | 92.95              | 108.4              | 7.7                     | 4.8                           | 1.6                            |
| 215.0   | 93.01                                                                                                       | 85.81              | 100.2              | 7.7                     | 4.9                           | 1.6                            |
| 220.0   | 86.08                                                                                                       | 79.34              | 92.81              | 7.8                     | 5.1                           | 1.5                            |
| 225.0   | 79.78                                                                                                       | 73.48              | 86.08              | 7.9                     | 5.2                           | 1.5                            |
| 230.0   | 74.05                                                                                                       | 68.15              | 79.95              | 8.0                     | 5.4                           | 1.5                            |
| 235.0   | 68.83                                                                                                       | 63.30              | 74.37              | 8.0                     | 5.6                           | 1.4                            |



**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0103H000</b> |                                                                                                                        |                      |                      |                                      |         |         |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8407                                                                                                                   |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3450 K, R <sub>25</sub> = 10000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 240.0                  | 64.08                                                                                                                  | 58.87                | 69.28                | 8.1                                  | 5.7     | 1.4     |
| 245.0                  | 59.73                                                                                                                  | 54.84                | 64.62                | 8.2                                  | 5.9     | 1.4     |
| 250.0                  | 55.75                                                                                                                  | 51.15                | 60.35                | 8.3                                  | 6.0     | 1.4     |
| 255.0                  | 52.11                                                                                                                  | 47.77                | 56.44                | 8.3                                  | 6.2     | 1.3     |
| 260.0                  | 48.76                                                                                                                  | 44.67                | 52.85                | 8.4                                  | 6.4     | 1.3     |
| 265.0                  | 45.69                                                                                                                  | 41.83                | 49.56                | 8.5                                  | 6.6     | 1.3     |
| 270.0                  | 42.87                                                                                                                  | 39.21                | 46.52                | 8.5                                  | 6.7     | 1.3     |
| 275.0                  | 40.26                                                                                                                  | 36.81                | 43.72                | 8.6                                  | 6.9     | 1.2     |
| 280.0                  | 37.86                                                                                                                  | 34.59                | 41.13                | 8.6                                  | 7.1     | 1.2     |
| 285.0                  | 35.64                                                                                                                  | 32.54                | 38.75                | 8.7                                  | 7.3     | 1.2     |
| 290.0                  | 33.59                                                                                                                  | 30.65                | 36.54                | 8.8                                  | 7.5     | 1.2     |
| 295.0                  | 31.70                                                                                                                  | 28.90                | 34.49                | 8.8                                  | 7.7     | 1.2     |
| 300.0                  | 29.94                                                                                                                  | 27.28                | 32.60                | 8.9                                  | 7.8     | 1.1     |

| <b>B57560G0103J000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8407                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3450 K, R <sub>25</sub> = 10000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 519910                                                                                                                 | 470250               | 569570               | 9.6                                  | 1.5        | 6.4        |
| -50.0                  | 379890                                                                                                                 | 345080               | 414710               | 9.2                                  | 1.5        | 6.2        |
| -45.0                  | 280700                                                                                                                 | 256010               | 305380               | 8.8                                  | 1.5        | 5.9        |
| -40.0                  | 209600                                                                                                                 | 191910               | 227300               | 8.4                                  | 1.5        | 5.7        |
| -35.0                  | 158090                                                                                                                 | 145270               | 170900               | 8.1                                  | 1.5        | 5.5        |
| -30.0                  | 120370                                                                                                                 | 111000               | 129740               | 7.8                                  | 1.5        | 5.4        |
| -25.0                  | 92484                                                                                                                  | 85569                | 99399                | 7.5                                  | 1.4        | 5.2        |
| -20.0                  | 71668                                                                                                                  | 66521                | 76816                | 7.2                                  | 1.4        | 5.0        |
| -15.0                  | 55993                                                                                                                  | 52129                | 59856                | 6.9                                  | 1.4        | 4.9        |
| -10.0                  | 44087                                                                                                                  | 41164                | 47009                | 6.6                                  | 1.4        | 4.7        |
| -5.0                   | 34971                                                                                                                  | 32744                | 37198                | 6.4                                  | 1.4        | 4.6        |
| 0.0                    | 27936                                                                                                                  | 26227                | 29645                | 6.1                                  | 1.4        | 4.4        |
| 5.0                    | 22468                                                                                                                  | 21147                | 23788                | 5.9                                  | 1.4        | 4.3        |
| 10.0                   | 18187                                                                                                                  | 17160                | 19214                | 5.6                                  | 1.4        | 4.2        |
| 15.0                   | 14813                                                                                                                  | 14010                | 15616                | 5.4                                  | 1.3        | 4.0        |
| 20.0                   | 12136                                                                                                                  | 11504                | 12768                | 5.2                                  | 1.3        | 3.9        |
| <b>25.0</b>            | <b>10000</b>                                                                                                           | <b>9500</b>          | <b>10500</b>         | <b>5.0</b>                           | <b>1.3</b> | <b>3.8</b> |
| 30.0                   | 8284                                                                                                                   | 7854                 | 8715                 | 5.2                                  | 1.4        | 3.7        |
| 35.0                   | 6899                                                                                                                   | 6527                 | 7271                 | 5.4                                  | 1.5        | 3.6        |
| 40.0                   | 5774                                                                                                                   | 5452                 | 6097                 | 5.6                                  | 1.6        | 3.5        |
| 45.0                   | 4856                                                                                                                   | 4576                 | 5136                 | 5.8                                  | 1.7        | 3.4        |

|         | B57560G0103J000                                                                                                                   |                           |                           |                         |                               |                 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|-----------------|
| R/T No. | 8407                                                                                                                              |                           |                           |                         |                               |                 |
| T (°C)  | $B_{0/100} = 3450 \text{ K}$ , $R_{25} = 10000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                           |                           |                         |                               |                 |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 50.0    | 4103                                                                                                                              | 3859                      | 4347                      | 5.9                     | 1.8                           | 3.3             |
| 55.0    | 3482                                                                                                                              | 3269                      | 3695                      | 6.1                     | 1.9                           | 3.2             |
| 60.0    | 2967                                                                                                                              | 2781                      | 3154                      | 6.3                     | 2.0                           | 3.2             |
| 65.0    | 2539                                                                                                                              | 2376                      | 2703                      | 6.4                     | 2.1                           | 3.1             |
| 70.0    | 2182                                                                                                                              | 2038                      | 2326                      | 6.6                     | 2.2                           | 3.0             |
| 75.0    | 1882                                                                                                                              | 1754                      | 2009                      | 6.8                     | 2.3                           | 2.9             |
| 80.0    | 1629                                                                                                                              | 1516                      | 1741                      | 6.9                     | 2.4                           | 2.8             |
| 85.0    | 1415                                                                                                                              | 1315                      | 1515                      | 7.1                     | 2.5                           | 2.8             |
| 90.0    | 1234                                                                                                                              | 1145                      | 1322                      | 7.2                     | 2.7                           | 2.7             |
| 95.0    | 1079                                                                                                                              | 999.7                     | 1158                      | 7.3                     | 2.8                           | 2.6             |
| 100.0   | 946.6                                                                                                                             | 875.9                     | 1017                      | 7.5                     | 2.9                           | 2.6             |
| 105.0   | 833.1                                                                                                                             | 769.8                     | 896.5                     | 7.6                     | 3.0                           | 2.5             |
| 110.0   | 735.5                                                                                                                             | 678.6                     | 792.3                     | 7.7                     | 3.1                           | 2.5             |
| 115.0   | 651.1                                                                                                                             | 600.0                     | 702.3                     | 7.9                     | 3.3                           | 2.4             |
| 120.0   | 578.1                                                                                                                             | 532.0                     | 624.2                     | 8.0                     | 3.4                           | 2.4             |
| 125.0   | 514.6                                                                                                                             | 473.0                     | 556.3                     | 8.1                     | 3.5                           | 2.3             |
| 130.0   | 459.4                                                                                                                             | 421.6                     | 497.1                     | 8.2                     | 3.7                           | 2.2             |
| 135.0   | 411.1                                                                                                                             | 376.8                     | 445.3                     | 8.3                     | 3.8                           | 2.2             |
| 140.0   | 368.8                                                                                                                             | 337.6                     | 399.9                     | 8.4                     | 3.9                           | 2.1             |
| 145.0   | 331.6                                                                                                                             | 303.3                     | 359.9                     | 8.5                     | 4.1                           | 2.1             |
| 150.0   | 298.9                                                                                                                             | 273.0                     | 324.7                     | 8.7                     | 4.2                           | 2.1             |
| 155.0   | 270.0                                                                                                                             | 246.3                     | 293.6                     | 8.8                     | 4.4                           | 2.0             |
| 160.0   | 244.4                                                                                                                             | 222.8                     | 266.1                     | 8.9                     | 4.5                           | 2.0             |
| 165.0   | 221.7                                                                                                                             | 201.9                     | 241.6                     | 9.0                     | 4.6                           | 1.9             |
| 170.0   | 201.6                                                                                                                             | 183.3                     | 219.8                     | 9.1                     | 4.8                           | 1.9             |
| 175.0   | 183.6                                                                                                                             | 166.8                     | 200.4                     | 9.1                     | 5.0                           | 1.8             |
| 180.0   | 167.6                                                                                                                             | 152.1                     | 183.1                     | 9.2                     | 5.1                           | 1.8             |
| 185.0   | 153.3                                                                                                                             | 139.0                     | 167.6                     | 9.3                     | 5.3                           | 1.8             |
| 190.0   | 140.4                                                                                                                             | 127.2                     | 153.7                     | 9.4                     | 5.4                           | 1.7             |
| 195.0   | 128.9                                                                                                                             | 116.6                     | 141.1                     | 9.5                     | 5.6                           | 1.7             |
| 200.0   | 118.5                                                                                                                             | 107.1                     | 129.9                     | 9.6                     | 5.8                           | 1.7             |
| 205.0   | 109.1                                                                                                                             | 98.57                     | 119.7                     | 9.7                     | 5.9                           | 1.6             |
| 210.0   | 100.7                                                                                                                             | 90.85                     | 110.5                     | 9.8                     | 6.1                           | 1.6             |
| 215.0   | 93.01                                                                                                                             | 83.86                     | 102.2                     | 9.8                     | 6.3                           | 1.6             |
| 220.0   | 86.08                                                                                                                             | 77.54                     | 94.61                     | 9.9                     | 6.5                           | 1.5             |
| 225.0   | 79.78                                                                                                                             | 71.80                     | 87.75                     | 10.0                    | 6.6                           | 1.5             |
| 230.0   | 74.05                                                                                                                             | 66.59                     | 81.51                     | 10.1                    | 6.8                           | 1.5             |
| 235.0   | 68.83                                                                                                                             | 61.85                     | 75.82                     | 10.1                    | 7.0                           | 1.4             |
| 240.0   | 64.08                                                                                                                             | 57.53                     | 70.62                     | 10.2                    | 7.2                           | 1.4             |
| 245.0   | 59.73                                                                                                                             | 53.58                     | 65.87                     | 10.3                    | 7.4                           | 1.4             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0103J000</b> |                                                                                                                        |                      |                      |                                      |         |         |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8407                                                                                                                   |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3450 K, R <sub>25</sub> = 10000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 250.0                  | 55.75                                                                                                                  | 49.98                | 61.53                | 10.4                                 | 7.6     | 1.4     |
| 255.0                  | 52.11                                                                                                                  | 46.67                | 57.54                | 10.4                                 | 7.8     | 1.3     |
| 260.0                  | 48.76                                                                                                                  | 43.65                | 53.88                | 10.5                                 | 8.0     | 1.3     |
| 265.0                  | 45.69                                                                                                                  | 40.87                | 50.52                | 10.6                                 | 8.2     | 1.3     |
| 270.0                  | 42.87                                                                                                                  | 38.31                | 47.42                | 10.6                                 | 8.4     | 1.3     |
| 275.0                  | 40.26                                                                                                                  | 35.96                | 44.57                | 10.7                                 | 8.6     | 1.2     |
| 280.0                  | 37.86                                                                                                                  | 33.79                | 41.93                | 10.8                                 | 8.8     | 1.2     |
| 285.0                  | 35.64                                                                                                                  | 31.79                | 39.50                | 10.8                                 | 9.0     | 1.2     |
| 290.0                  | 33.59                                                                                                                  | 29.94                | 37.25                | 10.9                                 | 9.3     | 1.2     |
| 295.0                  | 31.70                                                                                                                  | 28.23                | 35.16                | 10.9                                 | 9.5     | 1.2     |
| 300.0                  | 29.94                                                                                                                  | 26.65                | 33.23                | 11.0                                 | 9.7     | 1.1     |

| <b>B57560G0203F000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 2065700                                                                                                                | 1940700              | 2190800              | 6.1                                  | 0.8        | 7.6        |
| -50.0                  | 1421600                                                                                                                | 1341700              | 1501500              | 5.6                                  | 0.8        | 7.3        |
| -45.0                  | 992390                                                                                                                 | 940670               | 1044100              | 5.2                                  | 0.7        | 7.1        |
| -40.0                  | 702160                                                                                                                 | 668310               | 736000               | 4.8                                  | 0.7        | 6.8        |
| -35.0                  | 503150                                                                                                                 | 480790               | 525520               | 4.4                                  | 0.7        | 6.5        |
| -30.0                  | 364900                                                                                                                 | 349980               | 379820               | 4.1                                  | 0.6        | 6.3        |
| -25.0                  | 267660                                                                                                                 | 257630               | 277680               | 3.7                                  | 0.6        | 6.1        |
| -20.0                  | 198440                                                                                                                 | 191660               | 205230               | 3.4                                  | 0.6        | 5.9        |
| -15.0                  | 148630                                                                                                                 | 144020               | 153250               | 3.1                                  | 0.5        | 5.7        |
| -10.0                  | 112400                                                                                                                 | 109250               | 115560               | 2.8                                  | 0.5        | 5.5        |
| -5.0                   | 85788                                                                                                                  | 83630                | 87947                | 2.5                                  | 0.5        | 5.3        |
| 0.0                    | 66048                                                                                                                  | 64570                | 67526                | 2.2                                  | 0.4        | 5.2        |
| 5.0                    | 51214                                                                                                                  | 50204                | 52223                | 2.0                                  | 0.4        | 5.0        |
| 10.0                   | 40034                                                                                                                  | 39347                | 40720                | 1.7                                  | 0.4        | 4.8        |
| 15.0                   | 31537                                                                                                                  | 31074                | 32000                | 1.5                                  | 0.3        | 4.7        |
| 20.0                   | 25027                                                                                                                  | 24719                | 25334                | 1.2                                  | 0.3        | 4.6        |
| <b>25.0</b>            | <b>20000</b>                                                                                                           | <b>19800</b>         | <b>20200</b>         | <b>1.0</b>                           | <b>0.2</b> | <b>4.4</b> |
| 30.0                   | 16090                                                                                                                  | 15894                | 16287                | 1.2                                  | 0.3        | 4.3        |
| 35.0                   | 13028                                                                                                                  | 12840                | 13215                | 1.4                                  | 0.3        | 4.2        |
| 40.0                   | 10613                                                                                                                  | 10438                | 10787                | 1.6                                  | 0.4        | 4.0        |
| 45.0                   | 8696                                                                                                                   | 8535                 | 8857                 | 1.8                                  | 0.5        | 3.9        |
| 50.0                   | 7166                                                                                                                   | 7019                 | 7312                 | 2.0                                  | 0.5        | 3.8        |
| 55.0                   | 5936                                                                                                                   | 5803                 | 6069                 | 2.2                                  | 0.6        | 3.7        |

|         | B57560G0203F000                                                                                                                   |                           |                           |                         |                               |                                |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8415                                                                                                                              |                           |                           |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 20000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                           |                           |                         |                               |                                |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 60.0    | 4943                                                                                                                              | 4823                      | 5063                      | 2.4                     | 0.7                           | 3.6                            |
| 65.0    | 4136                                                                                                                              | 4029                      | 4244                      | 2.6                     | 0.7                           | 3.5                            |
| 70.0    | 3478                                                                                                                              | 3381                      | 3574                      | 2.8                     | 0.8                           | 3.4                            |
| 75.0    | 2937                                                                                                                              | 2851                      | 3024                      | 3.0                     | 0.9                           | 3.3                            |
| 80.0    | 2492                                                                                                                              | 2414                      | 2569                      | 3.1                     | 1.0                           | 3.2                            |
| 85.0    | 2123                                                                                                                              | 2053                      | 2192                      | 3.3                     | 1.0                           | 3.2                            |
| 90.0    | 1816                                                                                                                              | 1753                      | 1878                      | 3.4                     | 1.1                           | 3.1                            |
| 95.0    | 1559                                                                                                                              | 1503                      | 1615                      | 3.6                     | 1.2                           | 3.0                            |
| 100.0   | 1344                                                                                                                              | 1293                      | 1394                      | 3.7                     | 1.3                           | 2.9                            |
| 105.0   | 1162                                                                                                                              | 1117                      | 1207                      | 3.9                     | 1.4                           | 2.9                            |
| 110.0   | 1009                                                                                                                              | 968.2                     | 1049                      | 4.0                     | 1.4                           | 2.8                            |
| 115.0   | 878.6                                                                                                                             | 842.0                     | 915.3                     | 4.2                     | 1.5                           | 2.7                            |
| 120.0   | 767.7                                                                                                                             | 734.7                     | 800.8                     | 4.3                     | 1.6                           | 2.7                            |
| 125.0   | 672.9                                                                                                                             | 643.1                     | 702.7                     | 4.4                     | 1.7                           | 2.6                            |
| 130.0   | 591.6                                                                                                                             | 564.6                     | 618.6                     | 4.6                     | 1.8                           | 2.5                            |
| 135.0   | 521.6                                                                                                                             | 497.1                     | 546.1                     | 4.7                     | 1.9                           | 2.5                            |
| 140.0   | 461.2                                                                                                                             | 439.0                     | 483.4                     | 4.8                     | 2.0                           | 2.4                            |
| 145.0   | 408.9                                                                                                                             | 388.7                     | 429.1                     | 4.9                     | 2.1                           | 2.4                            |
| 150.0   | 363.5                                                                                                                             | 345.2                     | 381.9                     | 5.1                     | 2.2                           | 2.3                            |
| 155.0   | 324.0                                                                                                                             | 307.2                     | 340.7                     | 5.2                     | 2.3                           | 2.3                            |
| 160.0   | 289.5                                                                                                                             | 274.2                     | 304.7                     | 5.3                     | 2.4                           | 2.2                            |
| 165.0   | 259.2                                                                                                                             | 245.3                     | 273.2                     | 5.4                     | 2.5                           | 2.2                            |
| 170.0   | 232.7                                                                                                                             | 219.9                     | 245.5                     | 5.5                     | 2.6                           | 2.1                            |
| 175.0   | 209.4                                                                                                                             | 197.6                     | 221.1                     | 5.6                     | 2.7                           | 2.1                            |
| 180.0   | 188.8                                                                                                                             | 178.0                     | 199.6                     | 5.7                     | 2.8                           | 2.0                            |
| 185.0   | 170.6                                                                                                                             | 160.7                     | 180.5                     | 5.8                     | 2.9                           | 2.0                            |
| 190.0   | 154.5                                                                                                                             | 145.3                     | 163.6                     | 5.9                     | 3.0                           | 2.0                            |
| 195.0   | 140.1                                                                                                                             | 131.7                     | 148.5                     | 6.0                     | 3.1                           | 1.9                            |
| 200.0   | 127.4                                                                                                                             | 119.6                     | 135.2                     | 6.1                     | 3.2                           | 1.9                            |
| 205.0   | 116.0                                                                                                                             | 108.8                     | 123.2                     | 6.2                     | 3.3                           | 1.9                            |
| 210.0   | 105.8                                                                                                                             | 99.20                     | 112.5                     | 6.3                     | 3.5                           | 1.8                            |
| 215.0   | 96.75                                                                                                                             | 90.58                     | 102.9                     | 6.4                     | 3.6                           | 1.8                            |
| 220.0   | 88.58                                                                                                                             | 82.86                     | 94.30                     | 6.5                     | 3.7                           | 1.7                            |
| 225.0   | 81.24                                                                                                                             | 75.92                     | 86.56                     | 6.5                     | 3.8                           | 1.7                            |
| 230.0   | 74.63                                                                                                                             | 69.68                     | 79.58                     | 6.6                     | 3.9                           | 1.7                            |
| 235.0   | 68.67                                                                                                                             | 64.06                     | 73.28                     | 6.7                     | 4.1                           | 1.6                            |
| 240.0   | 63.28                                                                                                                             | 58.98                     | 67.58                     | 6.8                     | 4.2                           | 1.6                            |
| 245.0   | 58.40                                                                                                                             | 54.38                     | 62.41                     | 6.9                     | 4.3                           | 1.6                            |
| 250.0   | 53.98                                                                                                                             | 50.22                     | 57.73                     | 7.0                     | 4.5                           | 1.6                            |
| 255.0   | 49.96                                                                                                                             | 46.45                     | 53.47                     | 7.0                     | 4.6                           | 1.5                            |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0203F000</b> |                                                                                                                        |                      |                      |                                      |         |         |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 260.0                  | 46.31                                                                                                                  | 43.02                | 49.60                | 7.1                                  | 4.7     | 1.5     |
| 265.0                  | 42.98                                                                                                                  | 39.89                | 46.06                | 7.2                                  | 4.9     | 1.5     |
| 270.0                  | 39.94                                                                                                                  | 37.05                | 42.84                | 7.3                                  | 5.0     | 1.5     |
| 275.0                  | 37.17                                                                                                                  | 34.45                | 39.89                | 7.3                                  | 5.1     | 1.4     |
| 280.0                  | 34.63                                                                                                                  | 32.07                | 37.19                | 7.4                                  | 5.3     | 1.4     |
| 285.0                  | 32.31                                                                                                                  | 29.90                | 34.72                | 7.5                                  | 5.4     | 1.4     |
| 290.0                  | 30.17                                                                                                                  | 27.90                | 32.45                | 7.5                                  | 5.6     | 1.4     |
| 295.0                  | 28.21                                                                                                                  | 26.07                | 30.36                | 7.6                                  | 5.7     | 1.3     |
| 300.0                  | 26.41                                                                                                                  | 24.39                | 28.44                | 7.7                                  | 5.9     | 1.3     |

| <b>B57560G0203G000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 2065700                                                                                                                | 1919000              | 2212500              | 7.1                                  | 0.9        | 7.6        |
| -50.0                  | 1421600                                                                                                                | 1326800              | 1516400              | 6.7                                  | 0.9        | 7.3        |
| -45.0                  | 992390                                                                                                                 | 930330               | 1054400              | 6.3                                  | 0.9        | 7.1        |
| -40.0                  | 702160                                                                                                                 | 661030               | 743290               | 5.9                                  | 0.9        | 6.8        |
| -35.0                  | 503150                                                                                                                 | 475580               | 530730               | 5.5                                  | 0.8        | 6.5        |
| -30.0                  | 364900                                                                                                                 | 346220               | 383580               | 5.1                                  | 0.8        | 6.3        |
| -25.0                  | 267660                                                                                                                 | 254880               | 280430               | 4.8                                  | 0.8        | 6.1        |
| -20.0                  | 198440                                                                                                                 | 189630               | 207260               | 4.4                                  | 0.8        | 5.9        |
| -15.0                  | 148630                                                                                                                 | 142500               | 154770               | 4.1                                  | 0.7        | 5.7        |
| -10.0                  | 112400                                                                                                                 | 108110               | 116700               | 3.8                                  | 0.7        | 5.5        |
| -5.0                   | 85788                                                                                                                  | 82759                | 88817                | 3.5                                  | 0.7        | 5.3        |
| 0.0                    | 66048                                                                                                                  | 63901                | 68195                | 3.3                                  | 0.6        | 5.2        |
| 5.0                    | 51214                                                                                                                  | 49687                | 52740                | 3.0                                  | 0.6        | 5.0        |
| 10.0                   | 40034                                                                                                                  | 38944                | 41124                | 2.7                                  | 0.6        | 4.8        |
| 15.0                   | 31537                                                                                                                  | 30757                | 32317                | 2.5                                  | 0.5        | 4.7        |
| 20.0                   | 25027                                                                                                                  | 24468                | 25585                | 2.2                                  | 0.5        | 4.6        |
| <b>25.0</b>            | <b>20000</b>                                                                                                           | <b>19600</b>         | <b>20400</b>         | <b>2.0</b>                           | <b>0.5</b> | <b>4.4</b> |
| 30.0                   | 16090                                                                                                                  | 15732                | 16448                | 2.2                                  | 0.5        | 4.3        |
| 35.0                   | 13028                                                                                                                  | 12710                | 13346                | 2.4                                  | 0.6        | 4.2        |
| 40.0                   | 10613                                                                                                                  | 10331                | 10894                | 2.7                                  | 0.7        | 4.0        |
| 45.0                   | 8696                                                                                                                   | 8448                 | 8945                 | 2.9                                  | 0.7        | 3.9        |
| 50.0                   | 7166                                                                                                                   | 6947                 | 7385                 | 3.1                                  | 0.8        | 3.8        |
| 55.0                   | 5936                                                                                                                   | 5743                 | 6129                 | 3.2                                  | 0.9        | 3.7        |
| 60.0                   | 4943                                                                                                                   | 4773                 | 5113                 | 3.4                                  | 1.0        | 3.6        |
| 65.0                   | 4136                                                                                                                   | 3987                 | 4286                 | 3.6                                  | 1.0        | 3.5        |

|         | B57560G0203G000                                                                                             |                    |                    |                         |                               |                 |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No. | 8415                                                                                                        |                    |                    |                         |                               |                 |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 20000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 2\%$ |                    |                    |                         |                               |                 |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 70.0    | 3478                                                                                                        | 3346               | 3610               | 3.8                     | 1.1                           | 3.4             |
| 75.0    | 2937                                                                                                        | 2821               | 3054               | 4.0                     | 1.2                           | 3.3             |
| 80.0    | 2492                                                                                                        | 2389               | 2595               | 4.1                     | 1.3                           | 3.2             |
| 85.0    | 2123                                                                                                        | 2031               | 2214               | 4.3                     | 1.4                           | 3.2             |
| 90.0    | 1816                                                                                                        | 1735               | 1897               | 4.5                     | 1.4                           | 3.1             |
| 95.0    | 1559                                                                                                        | 1487               | 1631               | 4.6                     | 1.5                           | 3.0             |
| 100.0   | 1344                                                                                                        | 1280               | 1408               | 4.8                     | 1.6                           | 2.9             |
| 105.0   | 1162                                                                                                        | 1105               | 1219               | 4.9                     | 1.7                           | 2.9             |
| 110.0   | 1009                                                                                                        | 957.8              | 1060               | 5.1                     | 1.8                           | 2.8             |
| 115.0   | 878.6                                                                                                       | 833.0              | 924.3              | 5.2                     | 1.9                           | 2.7             |
| 120.0   | 767.7                                                                                                       | 726.8              | 808.7              | 5.3                     | 2.0                           | 2.7             |
| 125.0   | 672.9                                                                                                       | 636.1              | 709.7              | 5.5                     | 2.1                           | 2.6             |
| 130.0   | 591.6                                                                                                       | 558.5              | 624.7              | 5.6                     | 2.2                           | 2.5             |
| 135.0   | 521.6                                                                                                       | 491.7              | 551.5              | 5.7                     | 2.3                           | 2.5             |
| 140.0   | 461.2                                                                                                       | 434.2              | 488.2              | 5.9                     | 2.4                           | 2.4             |
| 145.0   | 408.9                                                                                                       | 384.5              | 433.3              | 6.0                     | 2.5                           | 2.4             |
| 150.0   | 363.5                                                                                                       | 341.4              | 385.7              | 6.1                     | 2.6                           | 2.3             |
| 155.0   | 324.0                                                                                                       | 303.9              | 344.1              | 6.2                     | 2.7                           | 2.3             |
| 160.0   | 289.5                                                                                                       | 271.2              | 307.8              | 6.3                     | 2.8                           | 2.2             |
| 165.0   | 259.2                                                                                                       | 242.6              | 275.9              | 6.4                     | 2.9                           | 2.2             |
| 170.0   | 232.7                                                                                                       | 217.5              | 247.9              | 6.5                     | 3.1                           | 2.1             |
| 175.0   | 209.4                                                                                                       | 195.5              | 223.3              | 6.6                     | 3.2                           | 2.1             |
| 180.0   | 188.8                                                                                                       | 176.0              | 201.5              | 6.8                     | 3.3                           | 2.0             |
| 185.0   | 170.6                                                                                                       | 158.9              | 182.3              | 6.9                     | 3.4                           | 2.0             |
| 190.0   | 154.5                                                                                                       | 143.7              | 165.2              | 7.0                     | 3.5                           | 2.0             |
| 195.0   | 140.1                                                                                                       | 130.2              | 150.0              | 7.1                     | 3.7                           | 1.9             |
| 200.0   | 127.4                                                                                                       | 118.3              | 136.5              | 7.1                     | 3.8                           | 1.9             |
| 205.0   | 116.0                                                                                                       | 107.6              | 124.4              | 7.2                     | 3.9                           | 1.9             |
| 210.0   | 105.8                                                                                                       | 98.08              | 113.6              | 7.3                     | 4.0                           | 1.8             |
| 215.0   | 96.75                                                                                                       | 89.56              | 103.9              | 7.4                     | 4.2                           | 1.8             |
| 220.0   | 88.58                                                                                                       | 81.92              | 95.24              | 7.5                     | 4.3                           | 1.7             |
| 225.0   | 81.24                                                                                                       | 75.06              | 87.42              | 7.6                     | 4.4                           | 1.7             |
| 230.0   | 74.63                                                                                                       | 68.89              | 80.37              | 7.7                     | 4.6                           | 1.7             |
| 235.0   | 68.67                                                                                                       | 63.33              | 74.00              | 7.8                     | 4.7                           | 1.6             |
| 240.0   | 63.28                                                                                                       | 58.31              | 68.25              | 7.9                     | 4.8                           | 1.6             |
| 245.0   | 58.40                                                                                                       | 53.77              | 63.03              | 7.9                     | 5.0                           | 1.6             |
| 250.0   | 53.98                                                                                                       | 49.65              | 58.30              | 8.0                     | 5.1                           | 1.6             |
| 255.0   | 49.96                                                                                                       | 45.92              | 54.00              | 8.1                     | 5.3                           | 1.5             |
| 260.0   | 46.31                                                                                                       | 42.53              | 50.09              | 8.2                     | 5.4                           | 1.5             |
| 265.0   | 42.98                                                                                                       | 39.44              | 46.52              | 8.2                     | 5.6                           | 1.5             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0203G000</b> |                                                                                                                        |                      |                      |                                      |         |         |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 270.0                  | 39.94                                                                                                                  | 36.62                | 43.26                | 8.3                                  | 5.7     | 1.5     |
| 275.0                  | 37.17                                                                                                                  | 34.05                | 40.29                | 8.4                                  | 5.9     | 1.4     |
| 280.0                  | 34.63                                                                                                                  | 31.70                | 37.56                | 8.5                                  | 6.0     | 1.4     |
| 285.0                  | 32.31                                                                                                                  | 29.55                | 35.06                | 8.5                                  | 6.2     | 1.4     |
| 290.0                  | 30.17                                                                                                                  | 27.58                | 32.77                | 8.6                                  | 6.3     | 1.4     |
| 295.0                  | 28.21                                                                                                                  | 25.77                | 30.66                | 8.7                                  | 6.5     | 1.3     |
| 300.0                  | 26.41                                                                                                                  | 24.11                | 28.72                | 8.7                                  | 6.7     | 1.3     |

| <b>B57560G0203H000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 2065700                                                                                                                | 1897300              | 2234200              | 8.2                                  | 1.1        | 7.6        |
| -50.0                  | 1421600                                                                                                                | 1311900              | 1531300              | 7.7                                  | 1.1        | 7.3        |
| -45.0                  | 992390                                                                                                                 | 919990               | 1064800              | 7.3                                  | 1.0        | 7.1        |
| -40.0                  | 702160                                                                                                                 | 653740               | 750570               | 6.9                                  | 1.0        | 6.8        |
| -35.0                  | 503150                                                                                                                 | 470380               | 535930               | 6.5                                  | 1.0        | 6.5        |
| -30.0                  | 364900                                                                                                                 | 342460               | 387340               | 6.1                                  | 1.0        | 6.3        |
| -25.0                  | 267660                                                                                                                 | 252130               | 283180               | 5.8                                  | 1.0        | 6.1        |
| -20.0                  | 198440                                                                                                                 | 187590               | 209290               | 5.5                                  | 0.9        | 5.9        |
| -15.0                  | 148630                                                                                                                 | 140980               | 156280               | 5.1                                  | 0.9        | 5.7        |
| -10.0                  | 112400                                                                                                                 | 106960               | 117840               | 4.8                                  | 0.9        | 5.5        |
| -5.0                   | 85788                                                                                                                  | 81888                | 89688                | 4.5                                  | 0.9        | 5.3        |
| 0.0                    | 66048                                                                                                                  | 63232                | 68864                | 4.3                                  | 0.8        | 5.2        |
| 5.0                    | 51214                                                                                                                  | 49170                | 53257                | 4.0                                  | 0.8        | 5.0        |
| 10.0                   | 40034                                                                                                                  | 38541                | 41527                | 3.7                                  | 0.8        | 4.8        |
| 15.0                   | 31537                                                                                                                  | 30440                | 32634                | 3.5                                  | 0.7        | 4.7        |
| 20.0                   | 25027                                                                                                                  | 24217                | 25836                | 3.2                                  | 0.7        | 4.6        |
| <b>25.0</b>            | <b>20000</b>                                                                                                           | <b>19400</b>         | <b>20600</b>         | <b>3.0</b>                           | <b>0.7</b> | <b>4.4</b> |
| 30.0                   | 16090                                                                                                                  | 15571                | 16609                | 3.2                                  | 0.8        | 4.3        |
| 35.0                   | 13028                                                                                                                  | 12579                | 13477                | 3.4                                  | 0.8        | 4.2        |
| 40.0                   | 10613                                                                                                                  | 10224                | 11001                | 3.7                                  | 0.9        | 4.0        |
| 45.0                   | 8696                                                                                                                   | 8360                 | 9032                 | 3.9                                  | 1.0        | 3.9        |
| 50.0                   | 7166                                                                                                                   | 6874                 | 7457                 | 4.1                                  | 1.1        | 3.8        |
| 55.0                   | 5936                                                                                                                   | 5683                 | 6189                 | 4.3                                  | 1.1        | 3.7        |
| 60.0                   | 4943                                                                                                                   | 4723                 | 5163                 | 4.5                                  | 1.2        | 3.6        |
| 65.0                   | 4136                                                                                                                   | 3945                 | 4328                 | 4.6                                  | 1.3        | 3.5        |
| 70.0                   | 3478                                                                                                                   | 3310                 | 3645                 | 4.8                                  | 1.4        | 3.4        |
| 75.0                   | 2937                                                                                                                   | 2791                 | 3084                 | 5.0                                  | 1.5        | 3.3        |

| B57560G0203H000 |                                                                                                             |                    |                    |                         |                          |                 |
|-----------------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|--------------------------|-----------------|
| R/T No.         | 8415                                                                                                        |                    |                    |                         |                          |                 |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 20000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                    |                    |                         |                          |                 |
|                 | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha (\%/K)$ |
| 80.0            | 2492                                                                                                        | 2363               | 2620               | 5.2                     | 1.6                      | 3.2             |
| 85.0            | 2123                                                                                                        | 2010               | 2236               | 5.3                     | 1.7                      | 3.2             |
| 90.0            | 1816                                                                                                        | 1716               | 1915               | 5.5                     | 1.8                      | 3.1             |
| 95.0            | 1559                                                                                                        | 1471               | 1647               | 5.6                     | 1.9                      | 3.0             |
| 100.0           | 1344                                                                                                        | 1266               | 1422               | 5.8                     | 2.0                      | 2.9             |
| 105.0           | 1162                                                                                                        | 1093               | 1231               | 5.9                     | 2.1                      | 2.9             |
| 110.0           | 1009                                                                                                        | 947.4              | 1070               | 6.1                     | 2.2                      | 2.8             |
| 115.0           | 878.6                                                                                                       | 823.9              | 933.4              | 6.2                     | 2.3                      | 2.7             |
| 120.0           | 767.7                                                                                                       | 718.8              | 816.6              | 6.4                     | 2.4                      | 2.7             |
| 125.0           | 672.9                                                                                                       | 629.1              | 716.7              | 6.5                     | 2.5                      | 2.6             |
| 130.0           | 591.6                                                                                                       | 552.3              | 630.8              | 6.6                     | 2.6                      | 2.5             |
| 135.0           | 521.6                                                                                                       | 486.3              | 556.9              | 6.8                     | 2.7                      | 2.5             |
| 140.0           | 461.2                                                                                                       | 429.4              | 493.0              | 6.9                     | 2.8                      | 2.4             |
| 145.0           | 408.9                                                                                                       | 380.2              | 437.6              | 7.0                     | 2.9                      | 2.4             |
| 150.0           | 363.5                                                                                                       | 337.6              | 389.4              | 7.1                     | 3.1                      | 2.3             |
| 155.0           | 324.0                                                                                                       | 300.5              | 347.5              | 7.2                     | 3.2                      | 2.3             |
| 160.0           | 289.5                                                                                                       | 268.1              | 310.8              | 7.4                     | 3.3                      | 2.2             |
| 165.0           | 259.2                                                                                                       | 239.9              | 278.6              | 7.5                     | 3.4                      | 2.2             |
| 170.0           | 232.7                                                                                                       | 215.1              | 250.4              | 7.6                     | 3.6                      | 2.1             |
| 175.0           | 209.4                                                                                                       | 193.3              | 225.5              | 7.7                     | 3.7                      | 2.1             |
| 180.0           | 188.8                                                                                                       | 174.1              | 203.5              | 7.8                     | 3.8                      | 2.0             |
| 185.0           | 170.6                                                                                                       | 157.1              | 184.1              | 7.9                     | 3.9                      | 2.0             |
| 190.0           | 154.5                                                                                                       | 142.1              | 166.8              | 8.0                     | 4.1                      | 2.0             |
| 195.0           | 140.1                                                                                                       | 128.8              | 151.5              | 8.1                     | 4.2                      | 1.9             |
| 200.0           | 127.4                                                                                                       | 116.9              | 137.8              | 8.2                     | 4.3                      | 1.9             |
| 205.0           | 116.0                                                                                                       | 106.4              | 125.6              | 8.3                     | 4.5                      | 1.9             |
| 210.0           | 105.8                                                                                                       | 96.97              | 114.7              | 8.4                     | 4.6                      | 1.8             |
| 215.0           | 96.75                                                                                                       | 88.54              | 104.9              | 8.5                     | 4.8                      | 1.8             |
| 220.0           | 88.58                                                                                                       | 80.99              | 96.17              | 8.6                     | 4.9                      | 1.7             |
| 225.0           | 81.24                                                                                                       | 74.21              | 88.27              | 8.7                     | 5.1                      | 1.7             |
| 230.0           | 74.63                                                                                                       | 68.11              | 81.15              | 8.7                     | 5.2                      | 1.7             |
| 235.0           | 68.67                                                                                                       | 62.61              | 74.73              | 8.8                     | 5.3                      | 1.6             |
| 240.0           | 63.28                                                                                                       | 57.64              | 68.92              | 8.9                     | 5.5                      | 1.6             |
| 245.0           | 58.40                                                                                                       | 53.15              | 63.65              | 9.0                     | 5.7                      | 1.6             |
| 250.0           | 53.98                                                                                                       | 49.08              | 58.87              | 9.1                     | 5.8                      | 1.6             |
| 255.0           | 49.96                                                                                                       | 45.39              | 54.53              | 9.1                     | 6.0                      | 1.5             |
| 260.0           | 46.31                                                                                                       | 42.03              | 50.58              | 9.2                     | 6.1                      | 1.5             |
| 265.0           | 42.98                                                                                                       | 38.98              | 46.98              | 9.3                     | 6.3                      | 1.5             |
| 270.0           | 39.94                                                                                                       | 36.20              | 43.69              | 9.4                     | 6.5                      | 1.5             |
| 275.0           | 37.17                                                                                                       | 33.66              | 40.68              | 9.4                     | 6.6                      | 1.4             |



**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0203H000</b> |                                                                                                                        |                      |                      |                                      |         |         |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 280.0                  | 34.63                                                                                                                  | 31.33                | 37.93                | 9.5                                  | 6.8     | 1.4     |
| 285.0                  | 32.31                                                                                                                  | 29.21                | 35.41                | 9.6                                  | 7.0     | 1.4     |
| 290.0                  | 30.17                                                                                                                  | 27.26                | 33.09                | 9.7                                  | 7.1     | 1.4     |
| 295.0                  | 28.21                                                                                                                  | 25.47                | 30.96                | 9.7                                  | 7.3     | 1.3     |
| 300.0                  | 26.41                                                                                                                  | 23.83                | 29.00                | 9.8                                  | 7.5     | 1.3     |

| <b>B57560G0203J000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 2065700                                                                                                                | 1853900              | 2277600              | 10.3                                 | 1.3        | 7.6        |
| -50.0                  | 1421600                                                                                                                | 1282200              | 1561000              | 9.8                                  | 1.3        | 7.3        |
| -45.0                  | 992390                                                                                                                 | 899320               | 1085500              | 9.4                                  | 1.3        | 7.1        |
| -40.0                  | 702160                                                                                                                 | 639170               | 765150               | 9.0                                  | 1.3        | 6.8        |
| -35.0                  | 503150                                                                                                                 | 459970               | 546340               | 8.6                                  | 1.3        | 6.5        |
| -30.0                  | 364900                                                                                                                 | 334940               | 394860               | 8.2                                  | 1.3        | 6.3        |
| -25.0                  | 267660                                                                                                                 | 246630               | 288680               | 7.9                                  | 1.3        | 6.1        |
| -20.0                  | 198440                                                                                                                 | 183530               | 213360               | 7.5                                  | 1.3        | 5.9        |
| -15.0                  | 148630                                                                                                                 | 137950               | 159320               | 7.2                                  | 1.3        | 5.7        |
| -10.0                  | 112400                                                                                                                 | 104670               | 120130               | 6.9                                  | 1.3        | 5.5        |
| -5.0                   | 85788                                                                                                                  | 80147                | 91430                | 6.6                                  | 1.2        | 5.3        |
| 0.0                    | 66048                                                                                                                  | 61895                | 70201                | 6.3                                  | 1.2        | 5.2        |
| 5.0                    | 51214                                                                                                                  | 48136                | 54292                | 6.0                                  | 1.2        | 5.0        |
| 10.0                   | 40034                                                                                                                  | 37735                | 42333                | 5.7                                  | 1.2        | 4.8        |
| 15.0                   | 31537                                                                                                                  | 29807                | 33267                | 5.5                                  | 1.2        | 4.7        |
| 20.0                   | 25027                                                                                                                  | 23716                | 26338                | 5.2                                  | 1.2        | 4.6        |
| <b>25.0</b>            | <b>20000</b>                                                                                                           | <b>19000</b>         | <b>21000</b>         | <b>5.0</b>                           | <b>1.1</b> | <b>4.4</b> |
| 30.0                   | 16090                                                                                                                  | 15249                | 16932                | 5.2                                  | 1.2        | 4.3        |
| 35.0                   | 13028                                                                                                                  | 12317                | 13738                | 5.5                                  | 1.3        | 4.2        |
| 40.0                   | 10613                                                                                                                  | 10011                | 11215                | 5.7                                  | 1.4        | 4.0        |
| 45.0                   | 8696                                                                                                                   | 8185                 | 9208                 | 5.9                                  | 1.5        | 3.9        |
| 50.0                   | 7166                                                                                                                   | 6729                 | 7602                 | 6.1                                  | 1.6        | 3.8        |
| 55.0                   | 5936                                                                                                                   | 5563                 | 6309                 | 6.3                                  | 1.7        | 3.7        |
| 60.0                   | 4943                                                                                                                   | 4623                 | 5263                 | 6.5                                  | 1.8        | 3.6        |
| 65.0                   | 4136                                                                                                                   | 3861                 | 4412                 | 6.7                                  | 1.9        | 3.5        |
| 70.0                   | 3478                                                                                                                   | 3240                 | 3716                 | 6.8                                  | 2.0        | 3.4        |
| 75.0                   | 2937                                                                                                                   | 2731                 | 3144                 | 7.0                                  | 2.1        | 3.3        |
| 80.0                   | 2492                                                                                                                   | 2312                 | 2671                 | 7.2                                  | 2.2        | 3.2        |
| 85.0                   | 2123                                                                                                                   | 1966                 | 2279                 | 7.4                                  | 2.3        | 3.2        |

|         | B57560G0203J000                                                                                             |                    |                    |                         |                          |                 |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|--------------------------|-----------------|
| R/T No. | 8415                                                                                                        |                    |                    |                         |                          |                 |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 20000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                    |                    |                         |                          |                 |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha (\%/K)$ |
| 90.0    | 1816                                                                                                        | 1679               | 1952               | 7.5                     | 2.4                      | 3.1             |
| 95.0    | 1559                                                                                                        | 1439               | 1679               | 7.7                     | 2.6                      | 3.0             |
| 100.0   | 1344                                                                                                        | 1238               | 1449               | 7.8                     | 2.7                      | 2.9             |
| 105.0   | 1162                                                                                                        | 1069               | 1255               | 8.0                     | 2.8                      | 2.9             |
| 110.0   | 1009                                                                                                        | 926.7              | 1091               | 8.1                     | 2.9                      | 2.8             |
| 115.0   | 878.6                                                                                                       | 805.8              | 951.5              | 8.3                     | 3.0                      | 2.7             |
| 120.0   | 767.7                                                                                                       | 703.0              | 832.5              | 8.4                     | 3.2                      | 2.7             |
| 125.0   | 672.9                                                                                                       | 615.2              | 730.6              | 8.6                     | 3.3                      | 2.6             |
| 130.0   | 591.6                                                                                                       | 540.1              | 643.1              | 8.7                     | 3.4                      | 2.5             |
| 135.0   | 521.6                                                                                                       | 475.5              | 567.7              | 8.8                     | 3.5                      | 2.5             |
| 140.0   | 461.2                                                                                                       | 419.9              | 502.6              | 9.0                     | 3.7                      | 2.4             |
| 145.0   | 408.9                                                                                                       | 371.7              | 446.1              | 9.1                     | 3.8                      | 2.4             |
| 150.0   | 363.5                                                                                                       | 330.0              | 397.0              | 9.2                     | 4.0                      | 2.3             |
| 155.0   | 324.0                                                                                                       | 293.7              | 354.2              | 9.3                     | 4.1                      | 2.3             |
| 160.0   | 289.5                                                                                                       | 262.1              | 316.8              | 9.4                     | 4.2                      | 2.2             |
| 165.0   | 259.2                                                                                                       | 234.5              | 284.0              | 9.6                     | 4.4                      | 2.2             |
| 170.0   | 232.7                                                                                                       | 210.2              | 255.2              | 9.7                     | 4.5                      | 2.1             |
| 175.0   | 209.4                                                                                                       | 188.9              | 229.9              | 9.8                     | 4.7                      | 2.1             |
| 180.0   | 188.8                                                                                                       | 170.1              | 207.5              | 9.9                     | 4.8                      | 2.0             |
| 185.0   | 170.6                                                                                                       | 153.5              | 187.6              | 10.0                    | 5.0                      | 2.0             |
| 190.0   | 154.5                                                                                                       | 138.9              | 170.1              | 10.1                    | 5.1                      | 2.0             |
| 195.0   | 140.1                                                                                                       | 125.8              | 154.4              | 10.2                    | 5.3                      | 1.9             |
| 200.0   | 127.4                                                                                                       | 114.3              | 140.5              | 10.3                    | 5.5                      | 1.9             |
| 205.0   | 116.0                                                                                                       | 103.9              | 128.1              | 10.4                    | 5.6                      | 1.9             |
| 210.0   | 105.8                                                                                                       | 94.74              | 117.0              | 10.5                    | 5.8                      | 1.8             |
| 215.0   | 96.75                                                                                                       | 86.51              | 107.0              | 10.6                    | 5.9                      | 1.8             |
| 220.0   | 88.58                                                                                                       | 79.12              | 98.04              | 10.7                    | 6.1                      | 1.7             |
| 225.0   | 81.24                                                                                                       | 72.49              | 89.99              | 10.8                    | 6.3                      | 1.7             |
| 230.0   | 74.63                                                                                                       | 66.53              | 82.73              | 10.9                    | 6.5                      | 1.7             |
| 235.0   | 68.67                                                                                                       | 61.15              | 76.18              | 10.9                    | 6.6                      | 1.6             |
| 240.0   | 63.28                                                                                                       | 56.30              | 70.25              | 11.0                    | 6.8                      | 1.6             |
| 245.0   | 58.40                                                                                                       | 51.91              | 64.89              | 11.1                    | 7.0                      | 1.6             |
| 250.0   | 53.98                                                                                                       | 47.94              | 60.02              | 11.2                    | 7.2                      | 1.6             |
| 255.0   | 49.96                                                                                                       | 44.33              | 55.59              | 11.3                    | 7.4                      | 1.5             |
| 260.0   | 46.31                                                                                                       | 41.05              | 51.56              | 11.3                    | 7.5                      | 1.5             |
| 265.0   | 42.98                                                                                                       | 38.07              | 47.89              | 11.4                    | 7.7                      | 1.5             |
| 270.0   | 39.94                                                                                                       | 35.35              | 44.54              | 11.5                    | 7.9                      | 1.5             |
| 275.0   | 37.17                                                                                                       | 32.87              | 41.47              | 11.6                    | 8.1                      | 1.4             |
| 280.0   | 34.63                                                                                                       | 30.60              | 38.66              | 11.6                    | 8.3                      | 1.4             |
| 285.0   | 32.31                                                                                                       | 28.52              | 36.09              | 11.7                    | 8.5                      | 1.4             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0203J000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 20000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 290.0                  | 30.17                                                                                                                  | 26.62                | 33.73                | 11.8                                 | 8.7        | 1.4        |
| 295.0                  | 28.21                                                                                                                  | 24.87                | 31.56                | 11.9                                 | 8.9        | 1.3        |
| 300.0                  | 26.41                                                                                                                  | 23.26                | 29.56                | 11.9                                 | 9.1        | 1.3        |
| <b>B57560G0303F000</b> |                                                                                                                        |                      |                      |                                      |            |            |
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 30000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 3098600                                                                                                                | 2911000              | 3286200              | 6.1                                  | 0.8        | 7.6        |
| -50.0                  | 2132400                                                                                                                | 2012500              | 2252300              | 5.6                                  | 0.8        | 7.3        |
| -45.0                  | 1488600                                                                                                                | 1411000              | 1566200              | 5.2                                  | 0.7        | 7.1        |
| -40.0                  | 1053200                                                                                                                | 1002500              | 1104000              | 4.8                                  | 0.7        | 6.8        |
| -35.0                  | 754730                                                                                                                 | 721180               | 788290               | 4.4                                  | 0.7        | 6.5        |
| -30.0                  | 547350                                                                                                                 | 524980               | 569730               | 4.1                                  | 0.6        | 6.3        |
| -25.0                  | 401480                                                                                                                 | 386440               | 416520               | 3.7                                  | 0.6        | 6.1        |
| -20.0                  | 297660                                                                                                                 | 287490               | 307840               | 3.4                                  | 0.6        | 5.9        |
| -15.0                  | 222950                                                                                                                 | 216020               | 229870               | 3.1                                  | 0.5        | 5.7        |
| -10.0                  | 168610                                                                                                                 | 163880               | 173330               | 2.8                                  | 0.5        | 5.5        |
| -5.0                   | 128680                                                                                                                 | 125450               | 131920               | 2.5                                  | 0.5        | 5.3        |
| 0.0                    | 99072                                                                                                                  | 96854                | 101290               | 2.2                                  | 0.4        | 5.2        |
| 5.0                    | 76820                                                                                                                  | 75306                | 78335                | 2.0                                  | 0.4        | 5.0        |
| 10.0                   | 60051                                                                                                                  | 59021                | 61081                | 1.7                                  | 0.4        | 4.8        |
| 15.0                   | 47305                                                                                                                  | 46611                | 48000                | 1.5                                  | 0.3        | 4.7        |
| 20.0                   | 37540                                                                                                                  | 37078                | 38002                | 1.2                                  | 0.3        | 4.6        |
| <b>25.0</b>            | <b>30000</b>                                                                                                           | <b>29700</b>         | <b>30300</b>         | <b>1.0</b>                           | <b>0.2</b> | <b>4.4</b> |
| 30.0                   | 24135                                                                                                                  | 23840                | 24430                | 1.2                                  | 0.3        | 4.3        |
| 35.0                   | 19542                                                                                                                  | 19261                | 19823                | 1.4                                  | 0.3        | 4.2        |
| 40.0                   | 15919                                                                                                                  | 15657                | 16181                | 1.6                                  | 0.4        | 4.0        |
| 45.0                   | 13044                                                                                                                  | 12803                | 13285                | 1.8                                  | 0.5        | 3.9        |
| 50.0                   | 10748                                                                                                                  | 10529                | 10968                | 2.0                                  | 0.5        | 3.8        |
| 55.0                   | 8904                                                                                                                   | 8705                 | 9104                 | 2.2                                  | 0.6        | 3.7        |
| 60.0                   | 7415                                                                                                                   | 7235                 | 7594                 | 2.4                                  | 0.7        | 3.6        |
| 65.0                   | 6205                                                                                                                   | 6043                 | 6366                 | 2.6                                  | 0.7        | 3.5        |
| 70.0                   | 5217                                                                                                                   | 5072                 | 5362                 | 2.8                                  | 0.8        | 3.4        |
| 75.0                   | 4406                                                                                                                   | 4276                 | 4536                 | 3.0                                  | 0.9        | 3.3        |
| 80.0                   | 3738                                                                                                                   | 3621                 | 3854                 | 3.1                                  | 1.0        | 3.2        |
| 85.0                   | 3184                                                                                                                   | 3080                 | 3288                 | 3.3                                  | 1.0        | 3.2        |
| 90.0                   | 2723                                                                                                                   | 2630                 | 2817                 | 3.4                                  | 1.1        | 3.1        |
| 95.0                   | 2338                                                                                                                   | 2255                 | 2422                 | 3.6                                  | 1.2        | 3.0        |

|         | B57560G0303F000                                                                                             |                    |                    |                         |                          |                 |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|--------------------------|-----------------|
| R/T No. | 8415                                                                                                        |                    |                    |                         |                          |                 |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 30000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 1\%$ |                    |                    |                         |                          |                 |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha (\%/K)$ |
| 100.0   | 2015                                                                                                        | 1940               | 2091               | 3.7                     | 1.3                      | 2.9             |
| 105.0   | 1743                                                                                                        | 1676               | 1811               | 3.9                     | 1.4                      | 2.9             |
| 110.0   | 1513                                                                                                        | 1452               | 1574               | 4.0                     | 1.4                      | 2.8             |
| 115.0   | 1318                                                                                                        | 1263               | 1373               | 4.2                     | 1.5                      | 2.7             |
| 120.0   | 1152                                                                                                        | 1102               | 1201               | 4.3                     | 1.6                      | 2.7             |
| 125.0   | 1009                                                                                                        | 964.6              | 1054               | 4.4                     | 1.7                      | 2.6             |
| 130.0   | 887.4                                                                                                       | 846.9              | 927.9              | 4.6                     | 1.8                      | 2.5             |
| 135.0   | 782.4                                                                                                       | 745.7              | 819.1              | 4.7                     | 1.9                      | 2.5             |
| 140.0   | 691.8                                                                                                       | 658.5              | 725.1              | 4.8                     | 2.0                      | 2.4             |
| 145.0   | 613.4                                                                                                       | 583.1              | 643.6              | 4.9                     | 2.1                      | 2.4             |
| 150.0   | 545.3                                                                                                       | 517.7              | 572.8              | 5.1                     | 2.2                      | 2.3             |
| 155.0   | 486.0                                                                                                       | 460.9              | 511.1              | 5.2                     | 2.3                      | 2.3             |
| 160.0   | 434.2                                                                                                       | 411.3              | 457.1              | 5.3                     | 2.4                      | 2.2             |
| 165.0   | 388.9                                                                                                       | 367.9              | 409.8              | 5.4                     | 2.5                      | 2.2             |
| 170.0   | 349.1                                                                                                       | 329.9              | 368.3              | 5.5                     | 2.6                      | 2.1             |
| 175.0   | 314.1                                                                                                       | 296.5              | 331.7              | 5.6                     | 2.7                      | 2.1             |
| 180.0   | 283.2                                                                                                       | 267.0              | 299.3              | 5.7                     | 2.8                      | 2.0             |
| 185.0   | 255.9                                                                                                       | 241.0              | 270.7              | 5.8                     | 2.9                      | 2.0             |
| 190.0   | 231.7                                                                                                       | 218.0              | 245.4              | 5.9                     | 3.0                      | 2.0             |
| 195.0   | 210.2                                                                                                       | 197.6              | 222.8              | 6.0                     | 3.1                      | 1.9             |
| 200.0   | 191.1                                                                                                       | 179.4              | 202.7              | 6.1                     | 3.2                      | 1.9             |
| 205.0   | 174.0                                                                                                       | 163.2              | 184.8              | 6.2                     | 3.3                      | 1.9             |
| 210.0   | 158.8                                                                                                       | 148.8              | 168.7              | 6.3                     | 3.5                      | 1.8             |
| 215.0   | 145.1                                                                                                       | 135.9              | 154.4              | 6.4                     | 3.6                      | 1.8             |
| 220.0   | 132.9                                                                                                       | 124.3              | 141.5              | 6.5                     | 3.7                      | 1.7             |
| 225.0   | 121.9                                                                                                       | 113.9              | 129.8              | 6.5                     | 3.8                      | 1.7             |
| 230.0   | 111.9                                                                                                       | 104.5              | 119.4              | 6.6                     | 3.9                      | 1.7             |
| 235.0   | 103.0                                                                                                       | 96.08              | 109.9              | 6.7                     | 4.1                      | 1.6             |
| 240.0   | 94.92                                                                                                       | 88.47              | 101.4              | 6.8                     | 4.2                      | 1.6             |
| 245.0   | 87.60                                                                                                       | 81.58              | 93.62              | 6.9                     | 4.3                      | 1.6             |
| 250.0   | 80.96                                                                                                       | 75.34              | 86.59              | 7.0                     | 4.5                      | 1.6             |
| 255.0   | 74.94                                                                                                       | 69.67              | 80.21              | 7.0                     | 4.6                      | 1.5             |
| 260.0   | 69.46                                                                                                       | 64.52              | 74.39              | 7.1                     | 4.7                      | 1.5             |
| 265.0   | 64.47                                                                                                       | 59.84              | 69.10              | 7.2                     | 4.9                      | 1.5             |
| 270.0   | 59.91                                                                                                       | 55.57              | 64.26              | 7.3                     | 5.0                      | 1.5             |
| 275.0   | 55.75                                                                                                       | 51.67              | 59.84              | 7.3                     | 5.1                      | 1.4             |
| 280.0   | 51.95                                                                                                       | 48.11              | 55.79              | 7.4                     | 5.3                      | 1.4             |
| 285.0   | 48.46                                                                                                       | 44.84              | 52.08              | 7.5                     | 5.4                      | 1.4             |
| 290.0   | 45.26                                                                                                       | 41.85              | 48.67              | 7.5                     | 5.6                      | 1.4             |
| 295.0   | 42.32                                                                                                       | 39.11              | 45.54              | 7.6                     | 5.7                      | 1.3             |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0303F000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 30000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 300.0                  | 39.62                                                                                                                  | 36.58                | 42.66                | 7.7                                  | 5.9        | 1.3        |
| <b>B57560G0303G000</b> |                                                                                                                        |                      |                      |                                      |            |            |
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 30000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 3098600                                                                                                                | 2878500              | 3318700              | 7.1                                  | 0.9        | 7.6        |
| -50.0                  | 2132400                                                                                                                | 1990200              | 2274600              | 6.7                                  | 0.9        | 7.3        |
| -45.0                  | 1488600                                                                                                                | 1395500              | 1581700              | 6.3                                  | 0.9        | 7.1        |
| -40.0                  | 1053200                                                                                                                | 991540               | 1114900              | 5.9                                  | 0.9        | 6.8        |
| -35.0                  | 754730                                                                                                                 | 713370               | 796090               | 5.5                                  | 0.8        | 6.5        |
| -30.0                  | 547350                                                                                                                 | 519330               | 575370               | 5.1                                  | 0.8        | 6.3        |
| -25.0                  | 401480                                                                                                                 | 382320               | 420650               | 4.8                                  | 0.8        | 6.1        |
| -20.0                  | 297660                                                                                                                 | 284440               | 310890               | 4.4                                  | 0.8        | 5.9        |
| -15.0                  | 222950                                                                                                                 | 213750               | 232150               | 4.1                                  | 0.7        | 5.7        |
| -10.0                  | 168610                                                                                                                 | 162160               | 175050               | 3.8                                  | 0.7        | 5.5        |
| -5.0                   | 128680                                                                                                                 | 124140               | 133230               | 3.5                                  | 0.7        | 5.3        |
| 0.0                    | 99072                                                                                                                  | 95851                | 102290               | 3.3                                  | 0.6        | 5.2        |
| 5.0                    | 76820                                                                                                                  | 74530                | 79111                | 3.0                                  | 0.6        | 5.0        |
| 10.0                   | 60051                                                                                                                  | 58416                | 61685                | 2.7                                  | 0.6        | 4.8        |
| 15.0                   | 47305                                                                                                                  | 46136                | 48475                | 2.5                                  | 0.5        | 4.7        |
| 20.0                   | 37540                                                                                                                  | 36702                | 38378                | 2.2                                  | 0.5        | 4.6        |
| <b>25.0</b>            | <b>30000</b>                                                                                                           | <b>29400</b>         | <b>30600</b>         | <b>2.0</b>                           | <b>0.5</b> | <b>4.4</b> |
| 30.0                   | 24135                                                                                                                  | 23599                | 24672                | 2.2                                  | 0.5        | 4.3        |
| 35.0                   | 19542                                                                                                                  | 19064                | 20019                | 2.4                                  | 0.6        | 4.2        |
| 40.0                   | 15919                                                                                                                  | 15497                | 16341                | 2.7                                  | 0.7        | 4.0        |
| 45.0                   | 13044                                                                                                                  | 12672                | 13417                | 2.9                                  | 0.7        | 3.9        |
| 50.0                   | 10748                                                                                                                  | 10420                | 11077                | 3.1                                  | 0.8        | 3.8        |
| 55.0                   | 8904                                                                                                                   | 8615                 | 9194                 | 3.2                                  | 0.9        | 3.7        |
| 60.0                   | 7415                                                                                                                   | 7160                 | 7669                 | 3.4                                  | 1.0        | 3.6        |
| 65.0                   | 6205                                                                                                                   | 5980                 | 6429                 | 3.6                                  | 1.0        | 3.5        |
| 70.0                   | 5217                                                                                                                   | 5019                 | 5415                 | 3.8                                  | 1.1        | 3.4        |
| 75.0                   | 4406                                                                                                                   | 4231                 | 4581                 | 4.0                                  | 1.2        | 3.3        |
| 80.0                   | 3738                                                                                                                   | 3583                 | 3892                 | 4.1                                  | 1.3        | 3.2        |
| 85.0                   | 3184                                                                                                                   | 3047                 | 3321                 | 4.3                                  | 1.4        | 3.2        |
| 90.0                   | 2723                                                                                                                   | 2602                 | 2845                 | 4.5                                  | 1.4        | 3.1        |
| 95.0                   | 2338                                                                                                                   | 2231                 | 2446                 | 4.6                                  | 1.5        | 3.0        |
| 100.0                  | 2015                                                                                                                   | 1919                 | 2112                 | 4.8                                  | 1.6        | 2.9        |
| 105.0                  | 1743                                                                                                                   | 1658                 | 1829                 | 4.9                                  | 1.7        | 2.9        |

|         | B57560G0303G000                                                                                                                   |                           |                           |                         |                               |                                |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8415                                                                                                                              |                           |                           |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 30000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                           |                           |                         |                               |                                |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 110.0   | 1513                                                                                                                              | 1437                      | 1590                      | 5.1                     | 1.8                           | 2.8                            |
| 115.0   | 1318                                                                                                                              | 1249                      | 1386                      | 5.2                     | 1.9                           | 2.7                            |
| 120.0   | 1152                                                                                                                              | 1090                      | 1213                      | 5.3                     | 2.0                           | 2.7                            |
| 125.0   | 1009                                                                                                                              | 954.2                     | 1065                      | 5.5                     | 2.1                           | 2.6                            |
| 130.0   | 887.4                                                                                                                             | 837.7                     | 937.1                     | 5.6                     | 2.2                           | 2.5                            |
| 135.0   | 782.4                                                                                                                             | 737.6                     | 827.2                     | 5.7                     | 2.3                           | 2.5                            |
| 140.0   | 691.8                                                                                                                             | 651.3                     | 732.3                     | 5.9                     | 2.4                           | 2.4                            |
| 145.0   | 613.4                                                                                                                             | 576.7                     | 650.0                     | 6.0                     | 2.5                           | 2.4                            |
| 150.0   | 545.3                                                                                                                             | 512.1                     | 578.5                     | 6.1                     | 2.6                           | 2.3                            |
| 155.0   | 486.0                                                                                                                             | 455.8                     | 516.1                     | 6.2                     | 2.7                           | 2.3                            |
| 160.0   | 434.2                                                                                                                             | 406.7                     | 461.6                     | 6.3                     | 2.8                           | 2.2                            |
| 165.0   | 388.9                                                                                                                             | 363.8                     | 413.9                     | 6.4                     | 2.9                           | 2.2                            |
| 170.0   | 349.1                                                                                                                             | 326.2                     | 371.9                     | 6.5                     | 3.1                           | 2.1                            |
| 175.0   | 314.1                                                                                                                             | 293.2                     | 334.9                     | 6.6                     | 3.2                           | 2.1                            |
| 180.0   | 283.2                                                                                                                             | 264.1                     | 302.3                     | 6.8                     | 3.3                           | 2.0                            |
| 185.0   | 255.9                                                                                                                             | 238.3                     | 273.4                     | 6.9                     | 3.4                           | 2.0                            |
| 190.0   | 231.7                                                                                                                             | 215.6                     | 247.8                     | 7.0                     | 3.5                           | 2.0                            |
| 195.0   | 210.2                                                                                                                             | 195.4                     | 225.0                     | 7.1                     | 3.7                           | 1.9                            |
| 200.0   | 191.1                                                                                                                             | 177.4                     | 204.7                     | 7.1                     | 3.8                           | 1.9                            |
| 205.0   | 174.0                                                                                                                             | 161.4                     | 186.6                     | 7.2                     | 3.9                           | 1.9                            |
| 210.0   | 158.8                                                                                                                             | 147.1                     | 170.4                     | 7.3                     | 4.0                           | 1.8                            |
| 215.0   | 145.1                                                                                                                             | 134.3                     | 155.9                     | 7.4                     | 4.2                           | 1.8                            |
| 220.0   | 132.9                                                                                                                             | 122.9                     | 142.9                     | 7.5                     | 4.3                           | 1.7                            |
| 225.0   | 121.9                                                                                                                             | 112.6                     | 131.1                     | 7.6                     | 4.4                           | 1.7                            |
| 230.0   | 111.9                                                                                                                             | 103.3                     | 120.5                     | 7.7                     | 4.6                           | 1.7                            |
| 235.0   | 103.0                                                                                                                             | 95.00                     | 111.0                     | 7.8                     | 4.7                           | 1.6                            |
| 240.0   | 94.92                                                                                                                             | 87.46                     | 102.4                     | 7.9                     | 4.8                           | 1.6                            |
| 245.0   | 87.60                                                                                                                             | 80.65                     | 94.55                     | 7.9                     | 5.0                           | 1.6                            |
| 250.0   | 80.96                                                                                                                             | 74.48                     | 87.45                     | 8.0                     | 5.1                           | 1.6                            |
| 255.0   | 74.94                                                                                                                             | 68.88                     | 81.00                     | 8.1                     | 5.3                           | 1.5                            |
| 260.0   | 69.46                                                                                                                             | 63.79                     | 75.13                     | 8.2                     | 5.4                           | 1.5                            |
| 265.0   | 64.47                                                                                                                             | 59.16                     | 69.78                     | 8.2                     | 5.6                           | 1.5                            |
| 270.0   | 59.91                                                                                                                             | 54.93                     | 64.89                     | 8.3                     | 5.7                           | 1.5                            |
| 275.0   | 55.75                                                                                                                             | 51.08                     | 60.43                     | 8.4                     | 5.9                           | 1.4                            |
| 280.0   | 51.95                                                                                                                             | 47.55                     | 56.34                     | 8.5                     | 6.0                           | 1.4                            |
| 285.0   | 48.46                                                                                                                             | 44.33                     | 52.59                     | 8.5                     | 6.2                           | 1.4                            |
| 290.0   | 45.26                                                                                                                             | 41.37                     | 49.15                     | 8.6                     | 6.3                           | 1.4                            |
| 295.0   | 42.32                                                                                                                             | 38.66                     | 45.99                     | 8.7                     | 6.5                           | 1.3                            |
| 300.0   | 39.62                                                                                                                             | 36.16                     | 43.08                     | 8.7                     | 6.7                           | 1.3                            |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0303H000</b> |                                                                                                                        |                      |                      |                                      |            |            |
|------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 30000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 3098600                                                                                                                | 2845900              | 3351300              | 8.2                                  | 1.1        | 7.6        |
| -50.0                  | 2132400                                                                                                                | 1967900              | 2296900              | 7.7                                  | 1.1        | 7.3        |
| -45.0                  | 1488600                                                                                                                | 1380000              | 1597200              | 7.3                                  | 1.0        | 7.1        |
| -40.0                  | 1053200                                                                                                                | 980610               | 1125900              | 6.9                                  | 1.0        | 6.8        |
| -35.0                  | 754730                                                                                                                 | 705570               | 803890               | 6.5                                  | 1.0        | 6.5        |
| -30.0                  | 547350                                                                                                                 | 513690               | 581010               | 6.1                                  | 1.0        | 6.3        |
| -25.0                  | 401480                                                                                                                 | 378190               | 424770               | 5.8                                  | 1.0        | 6.1        |
| -20.0                  | 297660                                                                                                                 | 281390               | 313940               | 5.5                                  | 0.9        | 5.9        |
| -15.0                  | 222950                                                                                                                 | 211470               | 234420               | 5.1                                  | 0.9        | 5.7        |
| -10.0                  | 168610                                                                                                                 | 160440               | 176770               | 4.8                                  | 0.9        | 5.5        |
| -5.0                   | 128680                                                                                                                 | 122830               | 134530               | 4.5                                  | 0.9        | 5.3        |
| 0.0                    | 99072                                                                                                                  | 94849                | 103300               | 4.3                                  | 0.8        | 5.2        |
| 5.0                    | 76820                                                                                                                  | 73754                | 79886                | 4.0                                  | 0.8        | 5.0        |
| 10.0                   | 60051                                                                                                                  | 57811                | 62290                | 3.7                                  | 0.8        | 4.8        |
| 15.0                   | 47305                                                                                                                  | 45661                | 48950                | 3.5                                  | 0.7        | 4.7        |
| 20.0                   | 37540                                                                                                                  | 36326                | 38754                | 3.2                                  | 0.7        | 4.6        |
| <b>25.0</b>            | <b>30000</b>                                                                                                           | <b>29100</b>         | <b>30900</b>         | <b>3.0</b>                           | <b>0.7</b> | <b>4.4</b> |
| 30.0                   | 24135                                                                                                                  | 23357                | 24914                | 3.2                                  | 0.8        | 4.3        |
| 35.0                   | 19542                                                                                                                  | 18868                | 20215                | 3.4                                  | 0.8        | 4.2        |
| 40.0                   | 15919                                                                                                                  | 15337                | 16502                | 3.7                                  | 0.9        | 4.0        |
| 45.0                   | 13044                                                                                                                  | 12540                | 13548                | 3.9                                  | 1.0        | 3.9        |
| 50.0                   | 10748                                                                                                                  | 10311                | 11186                | 4.1                                  | 1.1        | 3.8        |
| 55.0                   | 8904                                                                                                                   | 8525                 | 9284                 | 4.3                                  | 1.1        | 3.7        |
| 60.0                   | 7415                                                                                                                   | 7085                 | 7745                 | 4.5                                  | 1.2        | 3.6        |
| 65.0                   | 6205                                                                                                                   | 5917                 | 6492                 | 4.6                                  | 1.3        | 3.5        |
| 70.0                   | 5217                                                                                                                   | 4966                 | 5468                 | 4.8                                  | 1.4        | 3.4        |
| 75.0                   | 4406                                                                                                                   | 4186                 | 4626                 | 5.0                                  | 1.5        | 3.3        |
| 80.0                   | 3738                                                                                                                   | 3545                 | 3931                 | 5.2                                  | 1.6        | 3.2        |
| 85.0                   | 3184                                                                                                                   | 3015                 | 3354                 | 5.3                                  | 1.7        | 3.2        |
| 90.0                   | 2723                                                                                                                   | 2574                 | 2873                 | 5.5                                  | 1.8        | 3.1        |
| 95.0                   | 2338                                                                                                                   | 2207                 | 2470                 | 5.6                                  | 1.9        | 3.0        |
| 100.0                  | 2015                                                                                                                   | 1899                 | 2132                 | 5.8                                  | 2.0        | 2.9        |
| 105.0                  | 1743                                                                                                                   | 1640                 | 1847                 | 5.9                                  | 2.1        | 2.9        |
| 110.0                  | 1513                                                                                                                   | 1421                 | 1605                 | 6.1                                  | 2.2        | 2.8        |
| 115.0                  | 1318                                                                                                                   | 1236                 | 1400                 | 6.2                                  | 2.3        | 2.7        |
| 120.0                  | 1152                                                                                                                   | 1078                 | 1225                 | 6.4                                  | 2.4        | 2.7        |
| 125.0                  | 1009                                                                                                                   | 943.7                | 1075                 | 6.5                                  | 2.5        | 2.6        |
| 130.0                  | 887.4                                                                                                                  | 828.5                | 946.2                | 6.6                                  | 2.6        | 2.5        |
| 135.0                  | 782.4                                                                                                                  | 729.5                | 835.3                | 6.8                                  | 2.7        | 2.5        |

| B57560G0303H000 |                                                                                                             |                           |                           |                         |                          |                                |
|-----------------|-------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|--------------------------|--------------------------------|
| R/T No.         | 8415                                                                                                        |                           |                           |                         |                          |                                |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 30000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                           |                           |                         |                          |                                |
|                 | $R_{\text{nomL}}[\Omega]$                                                                                   | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 140.0           | 691.8                                                                                                       | 644.2                     | 739.5                     | 6.9                     | 2.8                      | 2.4                            |
| 145.0           | 613.4                                                                                                       | 570.4                     | 656.4                     | 7.0                     | 2.9                      | 2.4                            |
| 150.0           | 545.3                                                                                                       | 506.4                     | 584.2                     | 7.1                     | 3.1                      | 2.3                            |
| 155.0           | 486.0                                                                                                       | 450.7                     | 521.2                     | 7.2                     | 3.2                      | 2.3                            |
| 160.0           | 434.2                                                                                                       | 402.2                     | 466.2                     | 7.4                     | 3.3                      | 2.2                            |
| 165.0           | 388.9                                                                                                       | 359.8                     | 417.9                     | 7.5                     | 3.4                      | 2.2                            |
| 170.0           | 349.1                                                                                                       | 322.6                     | 375.6                     | 7.6                     | 3.6                      | 2.1                            |
| 175.0           | 314.1                                                                                                       | 289.9                     | 338.2                     | 7.7                     | 3.7                      | 2.1                            |
| 180.0           | 283.2                                                                                                       | 261.1                     | 305.3                     | 7.8                     | 3.8                      | 2.0                            |
| 185.0           | 255.9                                                                                                       | 235.7                     | 276.1                     | 7.9                     | 3.9                      | 2.0                            |
| 190.0           | 231.7                                                                                                       | 213.1                     | 250.2                     | 8.0                     | 4.1                      | 2.0                            |
| 195.0           | 210.2                                                                                                       | 193.2                     | 227.2                     | 8.1                     | 4.2                      | 1.9                            |
| 200.0           | 191.1                                                                                                       | 175.4                     | 206.7                     | 8.2                     | 4.3                      | 1.9                            |
| 205.0           | 174.0                                                                                                       | 159.6                     | 188.5                     | 8.3                     | 4.5                      | 1.9                            |
| 210.0           | 158.8                                                                                                       | 145.5                     | 172.1                     | 8.4                     | 4.6                      | 1.8                            |
| 215.0           | 145.1                                                                                                       | 132.8                     | 157.4                     | 8.5                     | 4.8                      | 1.8                            |
| 220.0           | 132.9                                                                                                       | 121.5                     | 144.3                     | 8.6                     | 4.9                      | 1.7                            |
| 225.0           | 121.9                                                                                                       | 111.3                     | 132.4                     | 8.7                     | 5.1                      | 1.7                            |
| 230.0           | 111.9                                                                                                       | 102.2                     | 121.7                     | 8.7                     | 5.2                      | 1.7                            |
| 235.0           | 103.0                                                                                                       | 93.91                     | 112.1                     | 8.8                     | 5.3                      | 1.6                            |
| 240.0           | 94.92                                                                                                       | 86.46                     | 103.4                     | 8.9                     | 5.5                      | 1.6                            |
| 245.0           | 87.60                                                                                                       | 79.72                     | 95.48                     | 9.0                     | 5.7                      | 1.6                            |
| 250.0           | 80.96                                                                                                       | 73.62                     | 88.31                     | 9.1                     | 5.8                      | 1.6                            |
| 255.0           | 74.94                                                                                                       | 68.08                     | 81.80                     | 9.1                     | 6.0                      | 1.5                            |
| 260.0           | 69.46                                                                                                       | 63.05                     | 75.87                     | 9.2                     | 6.1                      | 1.5                            |
| 265.0           | 64.47                                                                                                       | 58.47                     | 70.46                     | 9.3                     | 6.3                      | 1.5                            |
| 270.0           | 59.91                                                                                                       | 54.30                     | 65.53                     | 9.4                     | 6.5                      | 1.5                            |
| 275.0           | 55.75                                                                                                       | 50.49                     | 61.02                     | 9.4                     | 6.6                      | 1.4                            |
| 280.0           | 51.95                                                                                                       | 47.00                     | 56.89                     | 9.5                     | 6.8                      | 1.4                            |
| 285.0           | 48.46                                                                                                       | 43.81                     | 53.11                     | 9.6                     | 7.0                      | 1.4                            |
| 290.0           | 45.26                                                                                                       | 40.89                     | 49.63                     | 9.7                     | 7.1                      | 1.4                            |
| 295.0           | 42.32                                                                                                       | 38.21                     | 46.44                     | 9.7                     | 7.3                      | 1.3                            |
| 300.0           | 39.62                                                                                                       | 35.74                     | 43.50                     | 9.8                     | 7.5                      | 1.3                            |

| B57560G0303J000 |                                                                                                             |                           |                           |                         |                          |                                |
|-----------------|-------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|--------------------------|--------------------------------|
| R/T No.         | 8415                                                                                                        |                           |                           |                         |                          |                                |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 30000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                           |                           |                         |                          |                                |
|                 | $R_{\text{nomL}}[\Omega]$                                                                                   | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| -55.0           | 3098600                                                                                                     | 2780800                   | 3416300                   | 10.3                    | 1.3                      | 7.6                            |



|             | <b>B57560G0303J000</b>                                                                                                 |                      |                      |                                      |            |            |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8415                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 30000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -50.0       | 2132400                                                                                                                | 1923300              | 2341500              | 9.8                                  | 1.3        | 7.3        |
| -45.0       | 1488600                                                                                                                | 1349000              | 1628200              | 9.4                                  | 1.3        | 7.1        |
| -40.0       | 1053200                                                                                                                | 958750               | 1147700              | 9.0                                  | 1.3        | 6.8        |
| -35.0       | 754730                                                                                                                 | 689960               | 819500               | 8.6                                  | 1.3        | 6.5        |
| -30.0       | 547350                                                                                                                 | 502410               | 592290               | 8.2                                  | 1.3        | 6.3        |
| -25.0       | 401480                                                                                                                 | 369950               | 433020               | 7.9                                  | 1.3        | 6.1        |
| -20.0       | 297660                                                                                                                 | 275290               | 320030               | 7.5                                  | 1.3        | 5.9        |
| -15.0       | 222950                                                                                                                 | 206920               | 238980               | 7.2                                  | 1.3        | 5.7        |
| -10.0       | 168610                                                                                                                 | 157010               | 180200               | 6.9                                  | 1.3        | 5.5        |
| -5.0        | 128680                                                                                                                 | 120220               | 137140               | 6.6                                  | 1.2        | 5.3        |
| 0.0         | 99072                                                                                                                  | 92843                | 105300               | 6.3                                  | 1.2        | 5.2        |
| 5.0         | 76820                                                                                                                  | 72203                | 81437                | 6.0                                  | 1.2        | 5.0        |
| 10.0        | 60051                                                                                                                  | 56602                | 63500                | 5.7                                  | 1.2        | 4.8        |
| 15.0        | 47305                                                                                                                  | 44710                | 49901                | 5.5                                  | 1.2        | 4.7        |
| 20.0        | 37540                                                                                                                  | 35573                | 39507                | 5.2                                  | 1.2        | 4.6        |
| <b>25.0</b> | <b>30000</b>                                                                                                           | <b>28500</b>         | <b>31500</b>         | <b>5.0</b>                           | <b>1.1</b> | <b>4.4</b> |
| 30.0        | 24135                                                                                                                  | 22873                | 25398                | 5.2                                  | 1.2        | 4.3        |
| 35.0        | 19542                                                                                                                  | 18476                | 20608                | 5.5                                  | 1.3        | 4.2        |
| 40.0        | 15919                                                                                                                  | 15016                | 16822                | 5.7                                  | 1.4        | 4.0        |
| 45.0        | 13044                                                                                                                  | 12277                | 13812                | 5.9                                  | 1.5        | 3.9        |
| 50.0        | 10748                                                                                                                  | 10094                | 11403                | 6.1                                  | 1.6        | 3.8        |
| 55.0        | 8904                                                                                                                   | 8345                 | 9464                 | 6.3                                  | 1.7        | 3.7        |
| 60.0        | 7415                                                                                                                   | 6934                 | 7895                 | 6.5                                  | 1.8        | 3.6        |
| 65.0        | 6205                                                                                                                   | 5791                 | 6618                 | 6.7                                  | 1.9        | 3.5        |
| 70.0        | 5217                                                                                                                   | 4859                 | 5574                 | 6.8                                  | 2.0        | 3.4        |
| 75.0        | 4406                                                                                                                   | 4096                 | 4716                 | 7.0                                  | 2.1        | 3.3        |
| 80.0        | 3738                                                                                                                   | 3469                 | 4007                 | 7.2                                  | 2.2        | 3.2        |
| 85.0        | 3184                                                                                                                   | 2949                 | 3419                 | 7.4                                  | 2.3        | 3.2        |
| 90.0        | 2723                                                                                                                   | 2518                 | 2929                 | 7.5                                  | 2.4        | 3.1        |
| 95.0        | 2338                                                                                                                   | 2159                 | 2518                 | 7.7                                  | 2.6        | 3.0        |
| 100.0       | 2015                                                                                                                   | 1857                 | 2174                 | 7.8                                  | 2.7        | 2.9        |
| 105.0       | 1743                                                                                                                   | 1604                 | 1883                 | 8.0                                  | 2.8        | 2.9        |
| 110.0       | 1513                                                                                                                   | 1390                 | 1637                 | 8.1                                  | 2.9        | 2.8        |
| 115.0       | 1318                                                                                                                   | 1209                 | 1427                 | 8.3                                  | 3.0        | 2.7        |
| 120.0       | 1152                                                                                                                   | 1054                 | 1249                 | 8.4                                  | 3.2        | 2.7        |
| 125.0       | 1009                                                                                                                   | 922.8                | 1096                 | 8.6                                  | 3.3        | 2.6        |
| 130.0       | 887.4                                                                                                                  | 810.1                | 964.6                | 8.7                                  | 3.4        | 2.5        |
| 135.0       | 782.4                                                                                                                  | 713.3                | 851.5                | 8.8                                  | 3.5        | 2.5        |
| 140.0       | 691.8                                                                                                                  | 629.8                | 753.8                | 9.0                                  | 3.7        | 2.4        |
| 145.0       | 613.4                                                                                                                  | 557.6                | 669.1                | 9.1                                  | 3.8        | 2.4        |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0303J000</b> |                                                                                                                                   |                    |                    |                         |                               |                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.                | 8415                                                                                                                              |                    |                    |                         |                               |                 |
| T (°C)                 | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 30000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                    |                    |                         |                               |                 |
|                        | $R_{nomL}[\Omega]$                                                                                                                | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 150.0                  | 545.3                                                                                                                             | 495.0              | 595.5              | 9.2                     | 4.0                           | 2.3             |
| 155.0                  | 486.0                                                                                                                             | 440.6              | 531.3              | 9.3                     | 4.1                           | 2.3             |
| 160.0                  | 434.2                                                                                                                             | 393.2              | 475.2              | 9.4                     | 4.2                           | 2.2             |
| 165.0                  | 388.9                                                                                                                             | 351.7              | 426.1              | 9.6                     | 4.4                           | 2.2             |
| 170.0                  | 349.1                                                                                                                             | 315.3              | 382.9              | 9.7                     | 4.5                           | 2.1             |
| 175.0                  | 314.1                                                                                                                             | 283.3              | 344.8              | 9.8                     | 4.7                           | 2.1             |
| 180.0                  | 283.2                                                                                                                             | 255.2              | 311.2              | 9.9                     | 4.8                           | 2.0             |
| 185.0                  | 255.9                                                                                                                             | 230.3              | 281.5              | 10.0                    | 5.0                           | 2.0             |
| 190.0                  | 231.7                                                                                                                             | 208.3              | 255.1              | 10.1                    | 5.1                           | 2.0             |
| 195.0                  | 210.2                                                                                                                             | 188.8              | 231.6              | 10.2                    | 5.3                           | 1.9             |
| 200.0                  | 191.1                                                                                                                             | 171.4              | 210.8              | 10.3                    | 5.5                           | 1.9             |
| 205.0                  | 174.0                                                                                                                             | 155.9              | 192.1              | 10.4                    | 5.6                           | 1.9             |
| 210.0                  | 158.8                                                                                                                             | 142.1              | 175.4              | 10.5                    | 5.8                           | 1.8             |
| 215.0                  | 145.1                                                                                                                             | 129.8              | 160.5              | 10.6                    | 5.9                           | 1.8             |
| 220.0                  | 132.9                                                                                                                             | 118.7              | 147.1              | 10.7                    | 6.1                           | 1.7             |
| 225.0                  | 121.9                                                                                                                             | 108.7              | 135.0              | 10.8                    | 6.3                           | 1.7             |
| 230.0                  | 111.9                                                                                                                             | 99.79              | 124.1              | 10.9                    | 6.5                           | 1.7             |
| 235.0                  | 103.0                                                                                                                             | 91.73              | 114.3              | 10.9                    | 6.6                           | 1.6             |
| 240.0                  | 94.92                                                                                                                             | 84.45              | 105.4              | 11.0                    | 6.8                           | 1.6             |
| 245.0                  | 87.60                                                                                                                             | 77.87              | 97.33              | 11.1                    | 7.0                           | 1.6             |
| 250.0                  | 80.96                                                                                                                             | 71.91              | 90.02              | 11.2                    | 7.2                           | 1.6             |
| 255.0                  | 74.94                                                                                                                             | 66.50              | 83.38              | 11.3                    | 7.4                           | 1.5             |
| 260.0                  | 69.46                                                                                                                             | 61.58              | 77.34              | 11.3                    | 7.5                           | 1.5             |
| 265.0                  | 64.47                                                                                                                             | 57.10              | 71.83              | 11.4                    | 7.7                           | 1.5             |
| 270.0                  | 59.91                                                                                                                             | 53.02              | 66.80              | 11.5                    | 7.9                           | 1.5             |
| 275.0                  | 55.75                                                                                                                             | 49.30              | 62.21              | 11.6                    | 8.1                           | 1.4             |
| 280.0                  | 51.95                                                                                                                             | 45.90              | 58.00              | 11.6                    | 8.3                           | 1.4             |
| 285.0                  | 48.46                                                                                                                             | 42.78              | 54.14              | 11.7                    | 8.5                           | 1.4             |
| 290.0                  | 45.26                                                                                                                             | 39.92              | 50.60              | 11.8                    | 8.7                           | 1.4             |
| 295.0                  | 42.32                                                                                                                             | 37.30              | 47.34              | 11.9                    | 8.9                           | 1.3             |
| 300.0                  | 39.62                                                                                                                             | 34.89              | 44.35              | 11.9                    | 9.1                           | 1.3             |

| <b>B57560G0503F000</b> |                                                                                                                                   |                    |                    |                         |                               |                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|-----------------|
| R/T No.                | 8403                                                                                                                              |                    |                    |                         |                               |                 |
| T (°C)                 | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                    |                    |                         |                               |                 |
|                        | $R_{nomL}[\Omega]$                                                                                                                | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| -55.0                  | 5164300                                                                                                                           | 4851600            | 5477000            | 6.1                     | 0.8                           | 7.6             |
| -50.0                  | 3554000                                                                                                                           | 3354100            | 3753800            | 5.6                     | 0.8                           | 7.3             |
| -45.0                  | 2481000                                                                                                                           | 2351700            | 2610300            | 5.2                     | 0.7                           | 7.1             |

|             | <b>B57560G0503F000</b>                                                                                                 |                      |                      |                                      |            |            |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8403                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 50000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -40.0       | 1755400                                                                                                                | 1670800              | 1840000              | 4.8                                  | 0.7        | 6.8        |
| -35.0       | 1257900                                                                                                                | 1202000              | 1313800              | 4.4                                  | 0.7        | 6.5        |
| -30.0       | 912250                                                                                                                 | 874960               | 949550               | 4.1                                  | 0.6        | 6.3        |
| -25.0       | 669140                                                                                                                 | 644070               | 694210               | 3.7                                  | 0.6        | 6.1        |
| -20.0       | 496110                                                                                                                 | 479140               | 513070               | 3.4                                  | 0.6        | 5.9        |
| -15.0       | 371580                                                                                                                 | 360040               | 383120               | 3.1                                  | 0.5        | 5.7        |
| -10.0       | 281010                                                                                                                 | 273130               | 288890               | 2.8                                  | 0.5        | 5.5        |
| -5.0        | 214470                                                                                                                 | 209080               | 219870               | 2.5                                  | 0.5        | 5.3        |
| 0.0         | 165120                                                                                                                 | 161420               | 168820               | 2.2                                  | 0.4        | 5.2        |
| 5.0         | 128030                                                                                                                 | 125510               | 130560               | 2.0                                  | 0.4        | 5.0        |
| 10.0        | 100090                                                                                                                 | 98368                | 101800               | 1.7                                  | 0.4        | 4.8        |
| 15.0        | 78842                                                                                                                  | 77685                | 80000                | 1.5                                  | 0.3        | 4.7        |
| 20.0        | 62567                                                                                                                  | 61797                | 63336                | 1.2                                  | 0.3        | 4.6        |
| <b>25.0</b> | <b>50000</b>                                                                                                           | <b>49500</b>         | <b>50500</b>         | <b>1.0</b>                           | <b>0.2</b> | <b>4.4</b> |
| 30.0        | 40226                                                                                                                  | 39734                | 40717                | 1.2                                  | 0.3        | 4.3        |
| 35.0        | 32569                                                                                                                  | 32101                | 33038                | 1.4                                  | 0.3        | 4.2        |
| 40.0        | 26532                                                                                                                  | 26095                | 26969                | 1.6                                  | 0.4        | 4.0        |
| 45.0        | 21740                                                                                                                  | 21338                | 22142                | 1.8                                  | 0.5        | 3.9        |
| 50.0        | 17914                                                                                                                  | 17548                | 18281                | 2.0                                  | 0.5        | 3.8        |
| 55.0        | 14841                                                                                                                  | 14509                | 15173                | 2.2                                  | 0.6        | 3.7        |
| 60.0        | 12358                                                                                                                  | 12058                | 12657                | 2.4                                  | 0.7        | 3.6        |
| 65.0        | 10341                                                                                                                  | 10072                | 10610                | 2.6                                  | 0.7        | 3.5        |
| 70.0        | 8695                                                                                                                   | 8453                 | 8936                 | 2.8                                  | 0.8        | 3.4        |
| 75.0        | 7344                                                                                                                   | 7127                 | 7560                 | 3.0                                  | 0.9        | 3.3        |
| 80.0        | 6230                                                                                                                   | 6035                 | 6424                 | 3.1                                  | 1.0        | 3.2        |
| 85.0        | 5307                                                                                                                   | 5133                 | 5481                 | 3.3                                  | 1.0        | 3.2        |
| 90.0        | 4539                                                                                                                   | 4383                 | 4695                 | 3.4                                  | 1.1        | 3.1        |
| 95.0        | 3897                                                                                                                   | 3758                 | 4037                 | 3.6                                  | 1.2        | 3.0        |
| 100.0       | 3359                                                                                                                   | 3234                 | 3485                 | 3.7                                  | 1.3        | 2.9        |
| 105.0       | 2906                                                                                                                   | 2793                 | 3019                 | 3.9                                  | 1.4        | 2.9        |
| 110.0       | 2522                                                                                                                   | 2421                 | 2624                 | 4.0                                  | 1.4        | 2.8        |
| 115.0       | 2197                                                                                                                   | 2105                 | 2288                 | 4.2                                  | 1.5        | 2.7        |
| 120.0       | 1919                                                                                                                   | 1837                 | 2002                 | 4.3                                  | 1.6        | 2.7        |
| 125.0       | 1682                                                                                                                   | 1608                 | 1757                 | 4.4                                  | 1.7        | 2.6        |
| 130.0       | 1479                                                                                                                   | 1411                 | 1546                 | 4.6                                  | 1.8        | 2.5        |
| 135.0       | 1304                                                                                                                   | 1243                 | 1365                 | 4.7                                  | 1.9        | 2.5        |
| 140.0       | 1153                                                                                                                   | 1098                 | 1209                 | 4.8                                  | 2.0        | 2.4        |
| 145.0       | 1022                                                                                                                   | 971.9                | 1073                 | 4.9                                  | 2.1        | 2.4        |
| 150.0       | 908.8                                                                                                                  | 862.9                | 954.7                | 5.1                                  | 2.2        | 2.3        |
| 155.0       | 810.0                                                                                                                  | 768.1                | 851.8                | 5.2                                  | 2.3        | 2.3        |

|         | <b>B57560G0503F000</b>                                                                                      |                    |                    |                         |                               |                                |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8403                                                                                                        |                    |                    |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 1\%$ |                    |                    |                         |                               |                                |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 160.0   | 723.7                                                                                                       | 685.5              | 761.9              | 5.3                     | 2.4                           | 2.2                            |
| 165.0   | 648.1                                                                                                       | 613.2              | 683.0              | 5.4                     | 2.5                           | 2.2                            |
| 170.0   | 581.8                                                                                                       | 549.8              | 613.8              | 5.5                     | 2.6                           | 2.1                            |
| 175.0   | 523.4                                                                                                       | 494.1              | 552.8              | 5.6                     | 2.7                           | 2.1                            |
| 180.0   | 472.0                                                                                                       | 445.0              | 498.9              | 5.7                     | 2.8                           | 2.0                            |
| 185.0   | 426.5                                                                                                       | 401.7              | 451.2              | 5.8                     | 2.9                           | 2.0                            |
| 190.0   | 386.1                                                                                                       | 363.3              | 409.0              | 5.9                     | 3.0                           | 2.0                            |
| 195.0   | 350.3                                                                                                       | 329.3              | 371.4              | 6.0                     | 3.1                           | 1.9                            |
| 200.0   | 318.5                                                                                                       | 299.0              | 337.9              | 6.1                     | 3.2                           | 1.9                            |
| 205.0   | 290.0                                                                                                       | 272.1              | 308.0              | 6.2                     | 3.3                           | 1.9                            |
| 210.0   | 264.6                                                                                                       | 248.0              | 281.2              | 6.3                     | 3.5                           | 1.8                            |
| 215.0   | 241.9                                                                                                       | 226.5              | 257.3              | 6.4                     | 3.6                           | 1.8                            |
| 220.0   | 221.5                                                                                                       | 207.1              | 235.8              | 6.5                     | 3.7                           | 1.7                            |
| 225.0   | 203.1                                                                                                       | 189.8              | 216.4              | 6.5                     | 3.8                           | 1.7                            |
| 230.0   | 186.6                                                                                                       | 174.2              | 198.9              | 6.6                     | 3.9                           | 1.7                            |
| 235.0   | 171.7                                                                                                       | 160.1              | 183.2              | 6.7                     | 4.1                           | 1.6                            |
| 240.0   | 158.2                                                                                                       | 147.4              | 168.9              | 6.8                     | 4.2                           | 1.6                            |
| 245.0   | 146.0                                                                                                       | 136.0              | 156.0              | 6.9                     | 4.3                           | 1.6                            |
| 250.0   | 134.9                                                                                                       | 125.6              | 144.3              | 7.0                     | 4.5                           | 1.6                            |
| 255.0   | 124.9                                                                                                       | 116.1              | 133.7              | 7.0                     | 4.6                           | 1.5                            |
| 260.0   | 115.8                                                                                                       | 107.5              | 124.0              | 7.1                     | 4.7                           | 1.5                            |
| 265.0   | 107.4                                                                                                       | 99.73              | 115.2              | 7.2                     | 4.9                           | 1.5                            |
| 270.0   | 99.86                                                                                                       | 92.61              | 107.1              | 7.3                     | 5.0                           | 1.5                            |
| 275.0   | 92.92                                                                                                       | 86.12              | 99.73              | 7.3                     | 5.1                           | 1.4                            |
| 280.0   | 86.58                                                                                                       | 80.18              | 92.98              | 7.4                     | 5.3                           | 1.4                            |
| 285.0   | 80.77                                                                                                       | 74.74              | 86.79              | 7.5                     | 5.4                           | 1.4                            |
| 290.0   | 75.43                                                                                                       | 69.75              | 81.12              | 7.5                     | 5.6                           | 1.4                            |
| 295.0   | 70.54                                                                                                       | 65.18              | 75.90              | 7.6                     | 5.7                           | 1.3                            |
| 300.0   | 66.03                                                                                                       | 60.97              | 71.09              | 7.7                     | 5.9                           | 1.3                            |

|         | <b>B57560G0503G000</b>                                                                                      |                    |                    |                         |                               |                                |
|---------|-------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8403                                                                                                        |                    |                    |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 2\%$ |                    |                    |                         |                               |                                |
|         | $R_{nomL}[\Omega]$                                                                                          | $R_{minL}[\Omega]$ | $R_{maxL}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| –55.0   | 5164300                                                                                                     | 4797400            | 5531200            | 7.1                     | 0.9                           | 7.6                            |
| –50.0   | 3554000                                                                                                     | 3317000            | 3791000            | 6.7                     | 0.9                           | 7.3                            |
| –45.0   | 2481000                                                                                                     | 2325800            | 2636100            | 6.3                     | 0.9                           | 7.1                            |
| –40.0   | 1755400                                                                                                     | 1652600            | 1858200            | 5.9                     | 0.9                           | 6.8                            |
| –35.0   | 1257900                                                                                                     | 1189000            | 1326800            | 5.5                     | 0.8                           | 6.5                            |

|             | <b>B57560G0503G000</b>                                                                                                 |                      |                      |                                      |            |            |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8403                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 50000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -30.0       | 912250                                                                                                                 | 865560               | 958950               | 5.1                                  | 0.8        | 6.3        |
| -25.0       | 669140                                                                                                                 | 637190               | 701080               | 4.8                                  | 0.8        | 6.1        |
| -20.0       | 496110                                                                                                                 | 474060               | 518150               | 4.4                                  | 0.8        | 5.9        |
| -15.0       | 371580                                                                                                                 | 356250               | 386910               | 4.1                                  | 0.7        | 5.7        |
| -10.0       | 281010                                                                                                                 | 270270               | 291750               | 3.8                                  | 0.7        | 5.5        |
| -5.0        | 214470                                                                                                                 | 206900               | 222040               | 3.5                                  | 0.7        | 5.3        |
| 0.0         | 165120                                                                                                                 | 159750               | 170490               | 3.3                                  | 0.6        | 5.2        |
| 5.0         | 128030                                                                                                                 | 124220               | 131850               | 3.0                                  | 0.6        | 5.0        |
| 10.0        | 100090                                                                                                                 | 97360                | 102810               | 2.7                                  | 0.6        | 4.8        |
| 15.0        | 78842                                                                                                                  | 76893                | 80792                | 2.5                                  | 0.5        | 4.7        |
| 20.0        | 62567                                                                                                                  | 61170                | 63963                | 2.2                                  | 0.5        | 4.6        |
| <b>25.0</b> | <b>50000</b>                                                                                                           | <b>49000</b>         | <b>51000</b>         | <b>2.0</b>                           | <b>0.5</b> | <b>4.4</b> |
| 30.0        | 40226                                                                                                                  | 39331                | 41120                | 2.2                                  | 0.5        | 4.3        |
| 35.0        | 32569                                                                                                                  | 31774                | 33365                | 2.4                                  | 0.6        | 4.2        |
| 40.0        | 26532                                                                                                                  | 25828                | 27236                | 2.7                                  | 0.7        | 4.0        |
| 45.0        | 21740                                                                                                                  | 21119                | 22362                | 2.9                                  | 0.7        | 3.9        |
| 50.0        | 17914                                                                                                                  | 17367                | 18462                | 3.1                                  | 0.8        | 3.8        |
| 55.0        | 14841                                                                                                                  | 14358                | 15323                | 3.2                                  | 0.9        | 3.7        |
| 60.0        | 12358                                                                                                                  | 11933                | 12782                | 3.4                                  | 1.0        | 3.6        |
| 65.0        | 10341                                                                                                                  | 9967                 | 10715                | 3.6                                  | 1.0        | 3.5        |
| 70.0        | 8695                                                                                                                   | 8364                 | 9025                 | 3.8                                  | 1.1        | 3.4        |
| 75.0        | 7344                                                                                                                   | 7052                 | 7635                 | 4.0                                  | 1.2        | 3.3        |
| 80.0        | 6230                                                                                                                   | 5972                 | 6487                 | 4.1                                  | 1.3        | 3.2        |
| 85.0        | 5307                                                                                                                   | 5079                 | 5535                 | 4.3                                  | 1.4        | 3.2        |
| 90.0        | 4539                                                                                                                   | 4337                 | 4741                 | 4.5                                  | 1.4        | 3.1        |
| 95.0        | 3897                                                                                                                   | 3718                 | 4077                 | 4.6                                  | 1.5        | 3.0        |
| 100.0       | 3359                                                                                                                   | 3199                 | 3519                 | 4.8                                  | 1.6        | 2.9        |
| 105.0       | 2906                                                                                                                   | 2763                 | 3048                 | 4.9                                  | 1.7        | 2.9        |
| 110.0       | 2522                                                                                                                   | 2395                 | 2650                 | 5.1                                  | 1.8        | 2.8        |
| 115.0       | 2197                                                                                                                   | 2082                 | 2311                 | 5.2                                  | 1.9        | 2.7        |
| 120.0       | 1919                                                                                                                   | 1817                 | 2022                 | 5.3                                  | 2.0        | 2.7        |
| 125.0       | 1682                                                                                                                   | 1590                 | 1774                 | 5.5                                  | 2.1        | 2.6        |
| 130.0       | 1479                                                                                                                   | 1396                 | 1562                 | 5.6                                  | 2.2        | 2.5        |
| 135.0       | 1304                                                                                                                   | 1229                 | 1379                 | 5.7                                  | 2.3        | 2.5        |
| 140.0       | 1153                                                                                                                   | 1086                 | 1220                 | 5.9                                  | 2.4        | 2.4        |
| 145.0       | 1022                                                                                                                   | 961.2                | 1083                 | 6.0                                  | 2.5        | 2.4        |
| 150.0       | 908.8                                                                                                                  | 853.4                | 964.2                | 6.1                                  | 2.6        | 2.3        |
| 155.0       | 810.0                                                                                                                  | 759.7                | 860.2                | 6.2                                  | 2.7        | 2.3        |
| 160.0       | 723.7                                                                                                                  | 677.9                | 769.4                | 6.3                                  | 2.8        | 2.2        |
| 165.0       | 648.1                                                                                                                  | 606.4                | 689.8                | 6.4                                  | 2.9        | 2.2        |

|         | <b>B57560G0503G000</b>                                                                                                            |                           |                           |                         |                               |                                |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8403                                                                                                                              |                           |                           |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                           |                           |                         |                               |                                |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 170.0   | 581.8                                                                                                                             | 543.7                     | 619.9                     | 6.5                     | 3.1                           | 2.1                            |
| 175.0   | 523.4                                                                                                                             | 488.6                     | 558.2                     | 6.6                     | 3.2                           | 2.1                            |
| 180.0   | 472.0                                                                                                                             | 440.1                     | 503.8                     | 6.8                     | 3.3                           | 2.0                            |
| 185.0   | 426.5                                                                                                                             | 397.2                     | 455.7                     | 6.9                     | 3.4                           | 2.0                            |
| 190.0   | 386.1                                                                                                                             | 359.3                     | 413.0                     | 7.0                     | 3.5                           | 2.0                            |
| 195.0   | 350.3                                                                                                                             | 325.6                     | 375.0                     | 7.1                     | 3.7                           | 1.9                            |
| 200.0   | 318.5                                                                                                                             | 295.7                     | 341.2                     | 7.1                     | 3.8                           | 1.9                            |
| 205.0   | 290.0                                                                                                                             | 269.0                     | 311.0                     | 7.2                     | 3.9                           | 1.9                            |
| 210.0   | 264.6                                                                                                                             | 245.2                     | 284.0                     | 7.3                     | 4.0                           | 1.8                            |
| 215.0   | 241.9                                                                                                                             | 223.9                     | 259.8                     | 7.4                     | 4.2                           | 1.8                            |
| 220.0   | 221.5                                                                                                                             | 204.8                     | 238.1                     | 7.5                     | 4.3                           | 1.7                            |
| 225.0   | 203.1                                                                                                                             | 187.7                     | 218.5                     | 7.6                     | 4.4                           | 1.7                            |
| 230.0   | 186.6                                                                                                                             | 172.2                     | 200.9                     | 7.7                     | 4.6                           | 1.7                            |
| 235.0   | 171.7                                                                                                                             | 158.3                     | 185.0                     | 7.8                     | 4.7                           | 1.6                            |
| 240.0   | 158.2                                                                                                                             | 145.8                     | 170.6                     | 7.9                     | 4.8                           | 1.6                            |
| 245.0   | 146.0                                                                                                                             | 134.4                     | 157.6                     | 7.9                     | 5.0                           | 1.6                            |
| 250.0   | 134.9                                                                                                                             | 124.1                     | 145.8                     | 8.0                     | 5.1                           | 1.6                            |
| 255.0   | 124.9                                                                                                                             | 114.8                     | 135.0                     | 8.1                     | 5.3                           | 1.5                            |
| 260.0   | 115.8                                                                                                                             | 106.3                     | 125.2                     | 8.2                     | 5.4                           | 1.5                            |
| 265.0   | 107.4                                                                                                                             | 98.59                     | 116.3                     | 8.2                     | 5.6                           | 1.5                            |
| 270.0   | 99.86                                                                                                                             | 91.55                     | 108.2                     | 8.3                     | 5.7                           | 1.5                            |
| 275.0   | 92.92                                                                                                                             | 85.13                     | 100.7                     | 8.4                     | 5.9                           | 1.4                            |
| 280.0   | 86.58                                                                                                                             | 79.26                     | 93.90                     | 8.5                     | 6.0                           | 1.4                            |
| 285.0   | 80.77                                                                                                                             | 73.88                     | 87.65                     | 8.5                     | 6.2                           | 1.4                            |
| 290.0   | 75.43                                                                                                                             | 68.95                     | 81.92                     | 8.6                     | 6.3                           | 1.4                            |
| 295.0   | 70.54                                                                                                                             | 64.43                     | 76.65                     | 8.7                     | 6.5                           | 1.3                            |
| 300.0   | 66.03                                                                                                                             | 60.27                     | 71.80                     | 8.7                     | 6.7                           | 1.3                            |

|         | <b>B57560G0503H000</b>                                                                                                            |                           |                           |                         |                               |                                |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8403                                                                                                                              |                           |                           |                         |                               |                                |
| T (°C)  | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                           |                           |                         |                               |                                |
|         | $R_{\text{nomL}}[\Omega]$                                                                                                         | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0   | 5164300                                                                                                                           | 4743200                   | 5585400                   | 8.2                     | 1.1                           | 7.6                            |
| −50.0   | 3554000                                                                                                                           | 3279800                   | 3828100                   | 7.7                     | 1.1                           | 7.3                            |
| −45.0   | 2481000                                                                                                                           | 2300000                   | 2662000                   | 7.3                     | 1.0                           | 7.1                            |
| −40.0   | 1755400                                                                                                                           | 1634300                   | 1876400                   | 6.9                     | 1.0                           | 6.8                            |
| −35.0   | 1257900                                                                                                                           | 1175900                   | 1339800                   | 6.5                     | 1.0                           | 6.5                            |
| −30.0   | 912250                                                                                                                            | 856160                    | 968350                    | 6.1                     | 1.0                           | 6.3                            |
| −25.0   | 669140                                                                                                                            | 630320                    | 707950                    | 5.8                     | 1.0                           | 6.1                            |

|             | <b>B57560G0503H000</b>                                                                                                 |                      |                      |                                      |            |            |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8403                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 50000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -20.0       | 496110                                                                                                                 | 468980               | 523230               | 5.5                                  | 0.9        | 5.9        |
| -15.0       | 371580                                                                                                                 | 352450               | 390710               | 5.1                                  | 0.9        | 5.7        |
| -10.0       | 281010                                                                                                                 | 267410               | 294610               | 4.8                                  | 0.9        | 5.5        |
| -5.0        | 214470                                                                                                                 | 204720               | 224220               | 4.5                                  | 0.9        | 5.3        |
| 0.0         | 165120                                                                                                                 | 158080               | 172160               | 4.3                                  | 0.8        | 5.2        |
| 5.0         | 128030                                                                                                                 | 122920               | 133140               | 4.0                                  | 0.8        | 5.0        |
| 10.0        | 100090                                                                                                                 | 96352                | 103820               | 3.7                                  | 0.8        | 4.8        |
| 15.0        | 78842                                                                                                                  | 76101                | 81584                | 3.5                                  | 0.7        | 4.7        |
| 20.0        | 62567                                                                                                                  | 60543                | 64590                | 3.2                                  | 0.7        | 4.6        |
| <b>25.0</b> | <b>50000</b>                                                                                                           | <b>48500</b>         | <b>51500</b>         | <b>3.0</b>                           | <b>0.7</b> | <b>4.4</b> |
| 30.0        | 40226                                                                                                                  | 38928                | 41523                | 3.2                                  | 0.8        | 4.3        |
| 35.0        | 32569                                                                                                                  | 31447                | 33692                | 3.4                                  | 0.8        | 4.2        |
| 40.0        | 26532                                                                                                                  | 25561                | 27503                | 3.7                                  | 0.9        | 4.0        |
| 45.0        | 21740                                                                                                                  | 20900                | 22581                | 3.9                                  | 1.0        | 3.9        |
| 50.0        | 17914                                                                                                                  | 17186                | 18643                | 4.1                                  | 1.1        | 3.8        |
| 55.0        | 14841                                                                                                                  | 14208                | 15473                | 4.3                                  | 1.1        | 3.7        |
| 60.0        | 12358                                                                                                                  | 11808                | 12908                | 4.5                                  | 1.2        | 3.6        |
| 65.0        | 10341                                                                                                                  | 9862                 | 10820                | 4.6                                  | 1.3        | 3.5        |
| 70.0        | 8695                                                                                                                   | 8276                 | 9113                 | 4.8                                  | 1.4        | 3.4        |
| 75.0        | 7344                                                                                                                   | 6977                 | 7710                 | 5.0                                  | 1.5        | 3.3        |
| 80.0        | 6230                                                                                                                   | 5908                 | 6551                 | 5.2                                  | 1.6        | 3.2        |
| 85.0        | 5307                                                                                                                   | 5024                 | 5589                 | 5.3                                  | 1.7        | 3.2        |
| 90.0        | 4539                                                                                                                   | 4290                 | 4788                 | 5.5                                  | 1.8        | 3.1        |
| 95.0        | 3897                                                                                                                   | 3678                 | 4117                 | 5.6                                  | 1.9        | 3.0        |
| 100.0       | 3359                                                                                                                   | 3165                 | 3554                 | 5.8                                  | 2.0        | 2.9        |
| 105.0       | 2906                                                                                                                   | 2733                 | 3078                 | 5.9                                  | 2.1        | 2.9        |
| 110.0       | 2522                                                                                                                   | 2369                 | 2676                 | 6.1                                  | 2.2        | 2.8        |
| 115.0       | 2197                                                                                                                   | 2060                 | 2333                 | 6.2                                  | 2.3        | 2.7        |
| 120.0       | 1919                                                                                                                   | 1797                 | 2042                 | 6.4                                  | 2.4        | 2.7        |
| 125.0       | 1682                                                                                                                   | 1573                 | 1792                 | 6.5                                  | 2.5        | 2.6        |
| 130.0       | 1479                                                                                                                   | 1381                 | 1577                 | 6.6                                  | 2.6        | 2.5        |
| 135.0       | 1304                                                                                                                   | 1216                 | 1392                 | 6.8                                  | 2.7        | 2.5        |
| 140.0       | 1153                                                                                                                   | 1074                 | 1232                 | 6.9                                  | 2.8        | 2.4        |
| 145.0       | 1022                                                                                                                   | 950.6                | 1094                 | 7.0                                  | 2.9        | 2.4        |
| 150.0       | 908.8                                                                                                                  | 844.0                | 973.6                | 7.1                                  | 3.1        | 2.3        |
| 155.0       | 810.0                                                                                                                  | 751.2                | 868.7                | 7.2                                  | 3.2        | 2.3        |
| 160.0       | 723.7                                                                                                                  | 670.4                | 777.0                | 7.4                                  | 3.3        | 2.2        |
| 165.0       | 648.1                                                                                                                  | 599.7                | 696.6                | 7.5                                  | 3.4        | 2.2        |
| 170.0       | 581.8                                                                                                                  | 537.7                | 625.9                | 7.6                                  | 3.6        | 2.1        |
| 175.0       | 523.4                                                                                                                  | 483.2                | 563.7                | 7.7                                  | 3.7        | 2.1        |

| B57560G0503H000 |                                                                                                             |                          |                          |                         |                               |                                |
|-----------------|-------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.         | 8403                                                                                                        |                          |                          |                         |                               |                                |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                          |                          |                         |                               |                                |
|                 | $R_{\text{nom}}[\Omega]$                                                                                    | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 180.0           | 472.0                                                                                                       | 435.2                    | 508.8                    | 7.8                     | 3.8                           | 2.0                            |
| 185.0           | 426.5                                                                                                       | 392.8                    | 460.2                    | 7.9                     | 3.9                           | 2.0                            |
| 190.0           | 386.1                                                                                                       | 355.2                    | 417.1                    | 8.0                     | 4.1                           | 2.0                            |
| 195.0           | 350.3                                                                                                       | 321.9                    | 378.7                    | 8.1                     | 4.2                           | 1.9                            |
| 200.0           | 318.5                                                                                                       | 292.3                    | 344.6                    | 8.2                     | 4.3                           | 1.9                            |
| 205.0           | 290.0                                                                                                       | 266.0                    | 314.1                    | 8.3                     | 4.5                           | 1.9                            |
| 210.0           | 264.6                                                                                                       | 242.4                    | 286.8                    | 8.4                     | 4.6                           | 1.8                            |
| 215.0           | 241.9                                                                                                       | 221.4                    | 262.4                    | 8.5                     | 4.8                           | 1.8                            |
| 220.0           | 221.5                                                                                                       | 202.5                    | 240.4                    | 8.6                     | 4.9                           | 1.7                            |
| 225.0           | 203.1                                                                                                       | 185.5                    | 220.7                    | 8.7                     | 5.1                           | 1.7                            |
| 230.0           | 186.6                                                                                                       | 170.3                    | 202.9                    | 8.7                     | 5.2                           | 1.7                            |
| 235.0           | 171.7                                                                                                       | 156.5                    | 186.8                    | 8.8                     | 5.3                           | 1.6                            |
| 240.0           | 158.2                                                                                                       | 144.1                    | 172.3                    | 8.9                     | 5.5                           | 1.6                            |
| 245.0           | 146.0                                                                                                       | 132.9                    | 159.1                    | 9.0                     | 5.7                           | 1.6                            |
| 250.0           | 134.9                                                                                                       | 122.7                    | 147.2                    | 9.1                     | 5.8                           | 1.6                            |
| 255.0           | 124.9                                                                                                       | 113.5                    | 136.3                    | 9.1                     | 6.0                           | 1.5                            |
| 260.0           | 115.8                                                                                                       | 105.1                    | 126.4                    | 9.2                     | 6.1                           | 1.5                            |
| 265.0           | 107.4                                                                                                       | 97.45                    | 117.4                    | 9.3                     | 6.3                           | 1.5                            |
| 270.0           | 99.86                                                                                                       | 90.49                    | 109.2                    | 9.4                     | 6.5                           | 1.5                            |
| 275.0           | 92.92                                                                                                       | 84.14                    | 101.7                    | 9.4                     | 6.6                           | 1.4                            |
| 280.0           | 86.58                                                                                                       | 78.34                    | 94.82                    | 9.5                     | 6.8                           | 1.4                            |
| 285.0           | 80.77                                                                                                       | 73.02                    | 88.51                    | 9.6                     | 7.0                           | 1.4                            |
| 290.0           | 75.43                                                                                                       | 68.15                    | 82.72                    | 9.7                     | 7.1                           | 1.4                            |
| 295.0           | 70.54                                                                                                       | 63.68                    | 77.40                    | 9.7                     | 7.3                           | 1.3                            |
| 300.0           | 66.03                                                                                                       | 59.57                    | 72.50                    | 9.8                     | 7.5                           | 1.3                            |

| B57560G0503J000 |                                                                                                             |                          |                          |                         |                               |                                |
|-----------------|-------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.         | 8403                                                                                                        |                          |                          |                         |                               |                                |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                          |                          |                         |                               |                                |
|                 | $R_{\text{nom}}[\Omega]$                                                                                    | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0           | 5164300                                                                                                     | 4634700                  | 5693900                  | 10.3                    | 1.3                           | 7.6                            |
| −50.0           | 3554000                                                                                                     | 3205500                  | 3902500                  | 9.8                     | 1.3                           | 7.3                            |
| −45.0           | 2481000                                                                                                     | 2248300                  | 2713600                  | 9.4                     | 1.3                           | 7.1                            |
| −40.0           | 1755400                                                                                                     | 1597900                  | 1912900                  | 9.0                     | 1.3                           | 6.8                            |
| −35.0           | 1257900                                                                                                     | 1149900                  | 1365800                  | 8.6                     | 1.3                           | 6.5                            |
| −30.0           | 912250                                                                                                      | 837350                   | 987160                   | 8.2                     | 1.3                           | 6.3                            |
| −25.0           | 669140                                                                                                      | 616570                   | 721700                   | 7.9                     | 1.3                           | 6.1                            |
| −20.0           | 496110                                                                                                      | 458820                   | 533390                   | 7.5                     | 1.3                           | 5.9                            |
| −15.0           | 371580                                                                                                      | 344870                   | 398290                   | 7.2                     | 1.3                           | 5.7                            |



|             | <b>B57560G0503J000</b>                                                                                                 |                      |                      |                                      |            |            |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8403                                                                                                                   |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 3970 K, R <sub>25</sub> = 50000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                   | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -10.0       | 281010                                                                                                                 | 261690               | 300330               | 6.9                                  | 1.3        | 5.5        |
| -5.0        | 214470                                                                                                                 | 200370               | 228570               | 6.6                                  | 1.2        | 5.3        |
| 0.0         | 165120                                                                                                                 | 154740               | 175500               | 6.3                                  | 1.2        | 5.2        |
| 5.0         | 128030                                                                                                                 | 120340               | 135730               | 6.0                                  | 1.2        | 5.0        |
| 10.0        | 100090                                                                                                                 | 94337                | 105830               | 5.7                                  | 1.2        | 4.8        |
| 15.0        | 78842                                                                                                                  | 74517                | 83168                | 5.5                                  | 1.2        | 4.7        |
| 20.0        | 62567                                                                                                                  | 59289                | 65844                | 5.2                                  | 1.2        | 4.6        |
| <b>25.0</b> | <b>50000</b>                                                                                                           | <b>47500</b>         | <b>52500</b>         | <b>5.0</b>                           | <b>1.1</b> | <b>4.4</b> |
| 30.0        | 40226                                                                                                                  | 38121                | 42330                | 5.2                                  | 1.2        | 4.3        |
| 35.0        | 32569                                                                                                                  | 30793                | 34346                | 5.5                                  | 1.3        | 4.2        |
| 40.0        | 26532                                                                                                                  | 25027                | 28037                | 5.7                                  | 1.4        | 4.0        |
| 45.0        | 21740                                                                                                                  | 20461                | 23019                | 5.9                                  | 1.5        | 3.9        |
| 50.0        | 17914                                                                                                                  | 16824                | 19005                | 6.1                                  | 1.6        | 3.8        |
| 55.0        | 14841                                                                                                                  | 13908                | 15773                | 6.3                                  | 1.7        | 3.7        |
| 60.0        | 12358                                                                                                                  | 11557                | 13158                | 6.5                                  | 1.8        | 3.6        |
| 65.0        | 10341                                                                                                                  | 9652                 | 11030                | 6.7                                  | 1.9        | 3.5        |
| 70.0        | 8695                                                                                                                   | 8099                 | 9290                 | 6.8                                  | 2.0        | 3.4        |
| 75.0        | 7344                                                                                                                   | 6827                 | 7860                 | 7.0                                  | 2.1        | 3.3        |
| 80.0        | 6230                                                                                                                   | 5781                 | 6678                 | 7.2                                  | 2.2        | 3.2        |
| 85.0        | 5307                                                                                                                   | 4916                 | 5698                 | 7.4                                  | 2.3        | 3.2        |
| 90.0        | 4539                                                                                                                   | 4197                 | 4881                 | 7.5                                  | 2.4        | 3.1        |
| 95.0        | 3897                                                                                                                   | 3598                 | 4197                 | 7.7                                  | 2.6        | 3.0        |
| 100.0       | 3359                                                                                                                   | 3096                 | 3623                 | 7.8                                  | 2.7        | 2.9        |
| 105.0       | 2906                                                                                                                   | 2673                 | 3138                 | 8.0                                  | 2.8        | 2.9        |
| 110.0       | 2522                                                                                                                   | 2317                 | 2728                 | 8.1                                  | 2.9        | 2.8        |
| 115.0       | 2197                                                                                                                   | 2014                 | 2379                 | 8.3                                  | 3.0        | 2.7        |
| 120.0       | 1919                                                                                                                   | 1757                 | 2081                 | 8.4                                  | 3.2        | 2.7        |
| 125.0       | 1682                                                                                                                   | 1538                 | 1826                 | 8.6                                  | 3.3        | 2.6        |
| 130.0       | 1479                                                                                                                   | 1350                 | 1608                 | 8.7                                  | 3.4        | 2.5        |
| 135.0       | 1304                                                                                                                   | 1189                 | 1419                 | 8.8                                  | 3.5        | 2.5        |
| 140.0       | 1153                                                                                                                   | 1050                 | 1256                 | 9.0                                  | 3.7        | 2.4        |
| 145.0       | 1022                                                                                                                   | 929.4                | 1115                 | 9.1                                  | 3.8        | 2.4        |
| 150.0       | 908.8                                                                                                                  | 825.1                | 992.5                | 9.2                                  | 4.0        | 2.3        |
| 155.0       | 810.0                                                                                                                  | 734.4                | 885.5                | 9.3                                  | 4.1        | 2.3        |
| 160.0       | 723.7                                                                                                                  | 655.3                | 792.0                | 9.4                                  | 4.2        | 2.2        |
| 165.0       | 648.1                                                                                                                  | 586.1                | 710.1                | 9.6                                  | 4.4        | 2.2        |
| 170.0       | 581.8                                                                                                                  | 525.5                | 638.1                | 9.7                                  | 4.5        | 2.1        |
| 175.0       | 523.4                                                                                                                  | 472.2                | 574.7                | 9.8                                  | 4.7        | 2.1        |
| 180.0       | 472.0                                                                                                                  | 425.3                | 518.7                | 9.9                                  | 4.8        | 2.0        |
| 185.0       | 426.5                                                                                                                  | 383.8                | 469.1                | 10.0                                 | 5.0        | 2.0        |

| B57560G0503J000 |                                                                                                             |                   |                   |                         |                          |                                |
|-----------------|-------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|--------------------------------|
| R/T No.         | 8403                                                                                                        |                   |                   |                         |                          |                                |
| T (°C)          | $B_{0/100} = 3970 \text{ K}$ , $R_{25} = 50000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 5\%$ |                   |                   |                         |                          |                                |
|                 | $R_{nom}[\Omega]$                                                                                           | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 190.0           | 386.1                                                                                                       | 347.1             | 425.2             | 10.1                    | 5.1                      | 2.0                            |
| 195.0           | 350.3                                                                                                       | 314.6             | 386.1             | 10.2                    | 5.3                      | 1.9                            |
| 200.0           | 318.5                                                                                                       | 285.7             | 351.3             | 10.3                    | 5.5                      | 1.9                            |
| 205.0           | 290.0                                                                                                       | 259.9             | 320.2             | 10.4                    | 5.6                      | 1.9                            |
| 210.0           | 264.6                                                                                                       | 236.9             | 292.4             | 10.5                    | 5.8                      | 1.8                            |
| 215.0           | 241.9                                                                                                       | 216.3             | 267.5             | 10.6                    | 5.9                      | 1.8                            |
| 220.0           | 221.5                                                                                                       | 197.8             | 245.1             | 10.7                    | 6.1                      | 1.7                            |
| 225.0           | 203.1                                                                                                       | 181.2             | 225.0             | 10.8                    | 6.3                      | 1.7                            |
| 230.0           | 186.6                                                                                                       | 166.3             | 206.8             | 10.9                    | 6.5                      | 1.7                            |
| 235.0           | 171.7                                                                                                       | 152.9             | 190.4             | 10.9                    | 6.6                      | 1.6                            |
| 240.0           | 158.2                                                                                                       | 140.8             | 175.6             | 11.0                    | 6.8                      | 1.6                            |
| 245.0           | 146.0                                                                                                       | 129.8             | 162.2             | 11.1                    | 7.0                      | 1.6                            |
| 250.0           | 134.9                                                                                                       | 119.8             | 150.0             | 11.2                    | 7.2                      | 1.6                            |
| 255.0           | 124.9                                                                                                       | 110.8             | 139.0             | 11.3                    | 7.4                      | 1.5                            |
| 260.0           | 115.8                                                                                                       | 102.6             | 128.9             | 11.3                    | 7.5                      | 1.5                            |
| 265.0           | 107.4                                                                                                       | 95.17             | 119.7             | 11.4                    | 7.7                      | 1.5                            |
| 270.0           | 99.86                                                                                                       | 88.37             | 111.3             | 11.5                    | 7.9                      | 1.5                            |
| 275.0           | 92.92                                                                                                       | 82.17             | 103.7             | 11.6                    | 8.1                      | 1.4                            |
| 280.0           | 86.58                                                                                                       | 76.49             | 96.66             | 11.6                    | 8.3                      | 1.4                            |
| 285.0           | 80.77                                                                                                       | 71.30             | 90.23             | 11.7                    | 8.5                      | 1.4                            |
| 290.0           | 75.43                                                                                                       | 66.54             | 84.33             | 11.8                    | 8.7                      | 1.4                            |
| 295.0           | 70.54                                                                                                       | 62.17             | 78.90             | 11.9                    | 8.9                      | 1.3                            |
| 300.0           | 66.03                                                                                                       | 58.16             | 73.91             | 11.9                    | 9.1                      | 1.3                            |

| B57560G0104F000 |                                                                                                              |                   |                   |                         |                          |                                |
|-----------------|--------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|--------------------------------|
| R/T No.         | 8404                                                                                                         |                   |                   |                         |                          |                                |
| T (°C)          | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 1\%$ |                   |                   |                         |                          |                                |
|                 | $R_{nom}[\Omega]$                                                                                            | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0           | 9877500                                                                                                      | 9271000           | 10484000          | 6.1                     | 0.8                      | 7.4                            |
| −50.0           | 6864800                                                                                                      | 6473400           | 7256200           | 5.7                     | 0.8                      | 7.1                            |
| −45.0           | 4833700                                                                                                      | 4578300           | 5089000           | 5.3                     | 0.8                      | 6.9                            |
| −40.0           | 3445800                                                                                                      | 3277400           | 3614100           | 4.9                     | 0.7                      | 6.7                            |
| −35.0           | 2485200                                                                                                      | 2373300           | 2597100           | 4.5                     | 0.7                      | 6.4                            |
| −30.0           | 1812400                                                                                                      | 1737300           | 1887400           | 4.1                     | 0.7                      | 6.2                            |
| −25.0           | 1335600                                                                                                      | 1285000           | 1386300           | 3.8                     | 0.6                      | 6.0                            |
| −20.0           | 994130                                                                                                       | 959740            | 1028500           | 3.5                     | 0.6                      | 5.8                            |
| −15.0           | 747000                                                                                                       | 723540            | 770460            | 3.1                     | 0.6                      | 5.6                            |
| −10.0           | 566390                                                                                                       | 550330            | 582440            | 2.8                     | 0.5                      | 5.4                            |
| −5.0            | 433140                                                                                                       | 422130            | 444150            | 2.5                     | 0.5                      | 5.3                            |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

|             | <b>B57560G0104F000</b>                                                                                                  |                      |                      |                                      |            |            |
|-------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8404                                                                                                                    |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 4036 K, R <sub>25</sub> = 100000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                    | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 0.0         | 333960                                                                                                                  | 326420               | 341510               | 2.3                                  | 0.4        | 5.2        |
| 5.0         | 258500                                                                                                                  | 253360               | 263640               | 2.0                                  | 0.4        | 5.0        |
| 10.0        | 201660                                                                                                                  | 198180               | 205140               | 1.7                                  | 0.4        | 4.9        |
| 15.0        | 158500                                                                                                                  | 156160               | 160840               | 1.5                                  | 0.3        | 4.7        |
| 20.0        | 125470                                                                                                                  | 123920               | 127020               | 1.2                                  | 0.3        | 4.6        |
| <b>25.0</b> | <b>100000</b>                                                                                                           | <b>99000</b>         | <b>101000</b>        | <b>1.0</b>                           | <b>0.2</b> | <b>4.5</b> |
| 30.0        | 80223                                                                                                                   | 79239                | 81206                | 1.2                                  | 0.3        | 4.3        |
| 35.0        | 64759                                                                                                                   | 63823                | 65695                | 1.4                                  | 0.3        | 4.2        |
| 40.0        | 52589                                                                                                                   | 51718                | 53460                | 1.7                                  | 0.4        | 4.1        |
| 45.0        | 42951                                                                                                                   | 42151                | 43751                | 1.9                                  | 0.5        | 4.0        |
| 50.0        | 35272                                                                                                                   | 34544                | 36000                | 2.1                                  | 0.5        | 3.9        |
| 55.0        | 29119                                                                                                                   | 28462                | 29776                | 2.3                                  | 0.6        | 3.8        |
| 60.0        | 24161                                                                                                                   | 23570                | 24752                | 2.4                                  | 0.7        | 3.7        |
| 65.0        | 20144                                                                                                                   | 19615                | 20674                | 2.6                                  | 0.7        | 3.6        |
| 70.0        | 16874                                                                                                                   | 16400                | 17348                | 2.8                                  | 0.8        | 3.5        |
| 75.0        | 14198                                                                                                                   | 13775                | 14622                | 3.0                                  | 0.9        | 3.4        |
| 80.0        | 11998                                                                                                                   | 11620                | 12376                | 3.2                                  | 0.9        | 3.3        |
| 85.0        | 10181                                                                                                                   | 9844                 | 10519                | 3.3                                  | 1.0        | 3.2        |
| 90.0        | 8674                                                                                                                    | 8373                 | 8976                 | 3.5                                  | 1.1        | 3.2        |
| 95.0        | 7419                                                                                                                    | 7149                 | 7688                 | 3.6                                  | 1.2        | 3.1        |
| 100.0       | 6369                                                                                                                    | 6128                 | 6610                 | 3.8                                  | 1.3        | 3.0        |
| 105.0       | 5487                                                                                                                    | 5271                 | 5703                 | 3.9                                  | 1.3        | 2.9        |
| 110.0       | 4744                                                                                                                    | 4550                 | 4937                 | 4.1                                  | 1.4        | 2.9        |
| 115.0       | 4115                                                                                                                    | 3941                 | 4288                 | 4.2                                  | 1.5        | 2.8        |
| 120.0       | 3581                                                                                                                    | 3425                 | 3737                 | 4.4                                  | 1.6        | 2.7        |
| 125.0       | 3126                                                                                                                    | 2985                 | 3266                 | 4.5                                  | 1.7        | 2.7        |
| 130.0       | 2737                                                                                                                    | 2610                 | 2864                 | 4.6                                  | 1.8        | 2.6        |
| 135.0       | 2404                                                                                                                    | 2289                 | 2518                 | 4.8                                  | 1.8        | 2.6        |
| 140.0       | 2117                                                                                                                    | 2013                 | 2220                 | 4.9                                  | 1.9        | 2.5        |
| 145.0       | 1869                                                                                                                    | 1776                 | 1963                 | 5.0                                  | 2.0        | 2.5        |
| 150.0       | 1655                                                                                                                    | 1570                 | 1740                 | 5.1                                  | 2.1        | 2.4        |
| 155.0       | 1469                                                                                                                    | 1392                 | 1546                 | 5.2                                  | 2.2        | 2.4        |
| 160.0       | 1307                                                                                                                    | 1237                 | 1377                 | 5.4                                  | 2.3        | 2.3        |
| 165.0       | 1166                                                                                                                    | 1102                 | 1230                 | 5.5                                  | 2.4        | 2.3        |
| 170.0       | 1043                                                                                                                    | 984.6                | 1101                 | 5.6                                  | 2.5        | 2.2        |
| 175.0       | 934.5                                                                                                                   | 881.4                | 987.5                | 5.7                                  | 2.6        | 2.2        |
| 180.0       | 839.3                                                                                                                   | 790.7                | 887.8                | 5.8                                  | 2.7        | 2.1        |
| 185.0       | 755.4                                                                                                                   | 710.9                | 799.9                | 5.9                                  | 2.8        | 2.1        |
| 190.0       | 681.3                                                                                                                   | 640.5                | 722.2                | 6.0                                  | 2.9        | 2.0        |
| 195.0       | 615.8                                                                                                                   | 578.3                | 653.3                | 6.1                                  | 3.0        | 2.0        |

|         | B57560G0104F000                                                                                                                    |                          |                          |                         |                               |                          |
|---------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No. | 8404                                                                                                                               |                          |                          |                         |                               |                          |
| T (°C)  | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                          |                          |                         |                               |                          |
|         | $R_{\text{nom}}[\Omega]$                                                                                                           | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| 200.0   | 557.6                                                                                                                              | 523.1                    | 592.1                    | 6.2                     | 3.1                           | 2.0                      |
| 205.0   | 505.9                                                                                                                              | 474.1                    | 537.7                    | 6.3                     | 3.3                           | 1.9                      |
| 210.0   | 459.9                                                                                                                              | 430.6                    | 489.2                    | 6.4                     | 3.4                           | 1.9                      |
| 215.0   | 418.8                                                                                                                              | 391.7                    | 445.8                    | 6.5                     | 3.5                           | 1.9                      |
| 220.0   | 382.0                                                                                                                              | 357.0                    | 407.0                    | 6.6                     | 3.6                           | 1.8                      |
| 225.0   | 349.1                                                                                                                              | 325.9                    | 372.2                    | 6.6                     | 3.7                           | 1.8                      |
| 230.0   | 319.5                                                                                                                              | 298.0                    | 341.0                    | 6.7                     | 3.8                           | 1.8                      |
| 235.0   | 292.9                                                                                                                              | 273.0                    | 312.9                    | 6.8                     | 4.0                           | 1.7                      |
| 240.0   | 269.0                                                                                                                              | 250.4                    | 287.5                    | 6.9                     | 4.1                           | 1.7                      |
| 245.0   | 247.3                                                                                                                              | 230.1                    | 264.6                    | 7.0                     | 4.2                           | 1.7                      |
| 250.0   | 227.8                                                                                                                              | 211.7                    | 243.9                    | 7.1                     | 4.3                           | 1.6                      |
| 255.0   | 210.1                                                                                                                              | 195.1                    | 225.1                    | 7.1                     | 4.5                           | 1.6                      |
| 260.0   | 194.1                                                                                                                              | 180.1                    | 208.1                    | 7.2                     | 4.6                           | 1.6                      |
| 265.0   | 179.5                                                                                                                              | 166.4                    | 192.6                    | 7.3                     | 4.7                           | 1.5                      |
| 270.0   | 166.3                                                                                                                              | 154.0                    | 178.5                    | 7.4                     | 4.8                           | 1.5                      |
| 275.0   | 154.2                                                                                                                              | 142.8                    | 165.7                    | 7.4                     | 5.0                           | 1.5                      |
| 280.0   | 143.2                                                                                                                              | 132.5                    | 154.0                    | 7.5                     | 5.1                           | 1.5                      |
| 285.0   | 133.2                                                                                                                              | 123.1                    | 143.2                    | 7.6                     | 5.2                           | 1.4                      |
| 290.0   | 124.0                                                                                                                              | 114.5                    | 133.4                    | 7.6                     | 5.4                           | 1.4                      |
| 295.0   | 115.5                                                                                                                              | 106.6                    | 124.5                    | 7.7                     | 5.5                           | 1.4                      |
| 300.0   | 107.8                                                                                                                              | 99.44                    | 116.2                    | 7.8                     | 5.7                           | 1.4                      |

|         | B57560G0104G000                                                                                                                    |                          |                          |                         |                               |                          |
|---------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No. | 8404                                                                                                                               |                          |                          |                         |                               |                          |
| T (°C)  | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                          |                          |                         |                               |                          |
|         | $R_{\text{nom}}[\Omega]$                                                                                                           | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| -55.0   | 9877500                                                                                                                            | 9167200                  | 10588000                 | 7.2                     | 1.0                           | 7.4                      |
| -50.0   | 6864800                                                                                                                            | 6401600                  | 7328000                  | 6.7                     | 0.9                           | 7.1                      |
| -45.0   | 4833700                                                                                                                            | 4527900                  | 5139400                  | 6.3                     | 0.9                           | 6.9                      |
| -40.0   | 3445800                                                                                                                            | 3241700                  | 3649800                  | 5.9                     | 0.9                           | 6.7                      |
| -35.0   | 2485200                                                                                                                            | 2347600                  | 2622800                  | 5.5                     | 0.9                           | 6.4                      |
| -30.0   | 1812400                                                                                                                            | 1718600                  | 1906100                  | 5.2                     | 0.8                           | 6.2                      |
| -25.0   | 1335600                                                                                                                            | 1271200                  | 1400000                  | 4.8                     | 0.8                           | 6.0                      |
| -20.0   | 994130                                                                                                                             | 949550                   | 1038700                  | 4.5                     | 0.8                           | 5.8                      |
| -15.0   | 747000                                                                                                                             | 715910                   | 778090                   | 4.2                     | 0.7                           | 5.6                      |
| -10.0   | 566390                                                                                                                             | 544560                   | 588210                   | 3.9                     | 0.7                           | 5.4                      |
| -5.0    | 433140                                                                                                                             | 417740                   | 448550                   | 3.6                     | 0.7                           | 5.3                      |
| 0.0     | 333960                                                                                                                             | 323040                   | 344890                   | 3.3                     | 0.6                           | 5.2                      |
| 5.0     | 258500                                                                                                                             | 250750                   | 266250                   | 3.0                     | 0.6                           | 5.0                      |

|             | <b>B57560G0104G000</b>                                                                                                  |                      |                      |                                      |            |            |
|-------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8404                                                                                                                    |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 4036 K, R <sub>25</sub> = 100000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                    | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 10.0        | 201660                                                                                                                  | 196150               | 207170               | 2.7                                  | 0.6        | 4.9        |
| 15.0        | 158500                                                                                                                  | 154570               | 162430               | 2.5                                  | 0.5        | 4.7        |
| 20.0        | 125470                                                                                                                  | 122660               | 128270               | 2.2                                  | 0.5        | 4.6        |
| <b>25.0</b> | <b>100000</b>                                                                                                           | <b>98000</b>         | <b>102000</b>        | <b>2.0</b>                           | <b>0.4</b> | <b>4.5</b> |
| 30.0        | 80223                                                                                                                   | 78435                | 82010                | 2.2                                  | 0.5        | 4.3        |
| 35.0        | 64759                                                                                                                   | 63173                | 66345                | 2.4                                  | 0.6        | 4.2        |
| 40.0        | 52589                                                                                                                   | 51188                | 53990                | 2.7                                  | 0.6        | 4.1        |
| 45.0        | 42951                                                                                                                   | 41718                | 44184                | 2.9                                  | 0.7        | 4.0        |
| 50.0        | 35272                                                                                                                   | 34188                | 36356                | 3.1                                  | 0.8        | 3.9        |
| 55.0        | 29119                                                                                                                   | 28167                | 30071                | 3.3                                  | 0.9        | 3.8        |
| 60.0        | 24161                                                                                                                   | 23325                | 24997                | 3.5                                  | 0.9        | 3.7        |
| 65.0        | 20144                                                                                                                   | 19410                | 20879                | 3.6                                  | 1.0        | 3.6        |
| 70.0        | 16874                                                                                                                   | 16228                | 17520                | 3.8                                  | 1.1        | 3.5        |
| 75.0        | 14198                                                                                                                   | 13630                | 14766                | 4.0                                  | 1.2        | 3.4        |
| 80.0        | 11998                                                                                                                   | 11498                | 12499                | 4.2                                  | 1.3        | 3.3        |
| 85.0        | 10181                                                                                                                   | 9740                 | 10623                | 4.3                                  | 1.3        | 3.2        |
| 90.0        | 8674                                                                                                                    | 8284                 | 9065                 | 4.5                                  | 1.4        | 3.2        |
| 95.0        | 7419                                                                                                                    | 7073                 | 7765                 | 4.7                                  | 1.5        | 3.1        |
| 100.0       | 6369                                                                                                                    | 6062                 | 6675                 | 4.8                                  | 1.6        | 3.0        |
| 105.0       | 5487                                                                                                                    | 5215                 | 5759                 | 5.0                                  | 1.7        | 2.9        |
| 110.0       | 4744                                                                                                                    | 4501                 | 4986                 | 5.1                                  | 1.8        | 2.9        |
| 115.0       | 4115                                                                                                                    | 3899                 | 4331                 | 5.3                                  | 1.9        | 2.8        |
| 120.0       | 3581                                                                                                                    | 3388                 | 3774                 | 5.4                                  | 2.0        | 2.7        |
| 125.0       | 3126                                                                                                                    | 2953                 | 3299                 | 5.5                                  | 2.1        | 2.7        |
| 130.0       | 2737                                                                                                                    | 2582                 | 2892                 | 5.7                                  | 2.2        | 2.6        |
| 135.0       | 2404                                                                                                                    | 2264                 | 2543                 | 5.8                                  | 2.3        | 2.6        |
| 140.0       | 2117                                                                                                                    | 1991                 | 2242                 | 5.9                                  | 2.4        | 2.5        |
| 145.0       | 1869                                                                                                                    | 1756                 | 1982                 | 6.0                                  | 2.5        | 2.5        |
| 150.0       | 1655                                                                                                                    | 1553                 | 1757                 | 6.2                                  | 2.6        | 2.4        |
| 155.0       | 1469                                                                                                                    | 1377                 | 1561                 | 6.3                                  | 2.7        | 2.4        |
| 160.0       | 1307                                                                                                                    | 1224                 | 1391                 | 6.4                                  | 2.8        | 2.3        |
| 165.0       | 1166                                                                                                                    | 1090                 | 1242                 | 6.5                                  | 2.9        | 2.3        |
| 170.0       | 1043                                                                                                                    | 973.7                | 1112                 | 6.6                                  | 3.0        | 2.2        |
| 175.0       | 934.5                                                                                                                   | 871.6                | 997.3                | 6.7                                  | 3.1        | 2.2        |
| 180.0       | 839.3                                                                                                                   | 781.9                | 896.6                | 6.8                                  | 3.2        | 2.1        |
| 185.0       | 755.4                                                                                                                   | 703.0                | 807.8                | 6.9                                  | 3.3        | 2.1        |
| 190.0       | 681.3                                                                                                                   | 633.4                | 729.3                | 7.0                                  | 3.4        | 2.0        |
| 195.0       | 615.8                                                                                                                   | 571.8                | 659.7                | 7.1                                  | 3.6        | 2.0        |
| 200.0       | 557.6                                                                                                                   | 517.3                | 598.0                | 7.2                                  | 3.7        | 2.0        |
| 205.0       | 505.9                                                                                                                   | 468.8                | 543.0                | 7.3                                  | 3.8        | 1.9        |

|         | <b>B57560G0104G000</b>                                                                                       |                   |                   |                         |                          |                                |
|---------|--------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|--------------------------------|
| R/T No. | 8404                                                                                                         |                   |                   |                         |                          |                                |
| T (°C)  | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 2\%$ |                   |                   |                         |                          |                                |
|         | $R_{nom}[\Omega]$                                                                                            | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 210.0   | 459.9                                                                                                        | 425.7             | 494.0             | 7.4                     | 3.9                      | 1.9                            |
| 215.0   | 418.8                                                                                                        | 387.3             | 450.2             | 7.5                     | 4.1                      | 1.9                            |
| 220.0   | 382.0                                                                                                        | 352.9             | 411.1             | 7.6                     | 4.2                      | 1.8                            |
| 225.0   | 349.1                                                                                                        | 322.2             | 375.9             | 7.7                     | 4.3                      | 1.8                            |
| 230.0   | 319.5                                                                                                        | 294.6             | 344.4             | 7.8                     | 4.4                      | 1.8                            |
| 235.0   | 292.9                                                                                                        | 269.9             | 315.9             | 7.9                     | 4.6                      | 1.7                            |
| 240.0   | 269.0                                                                                                        | 247.6             | 290.3             | 8.0                     | 4.7                      | 1.7                            |
| 245.0   | 247.3                                                                                                        | 227.5             | 267.2             | 8.0                     | 4.8                      | 1.7                            |
| 250.0   | 227.8                                                                                                        | 209.3             | 246.3             | 8.1                     | 5.0                      | 1.6                            |
| 255.0   | 210.1                                                                                                        | 192.9             | 227.3             | 8.2                     | 5.1                      | 1.6                            |
| 260.0   | 194.1                                                                                                        | 178.0             | 210.1             | 8.3                     | 5.3                      | 1.6                            |
| 265.0   | 179.5                                                                                                        | 164.5             | 194.5             | 8.3                     | 5.4                      | 1.5                            |
| 270.0   | 166.3                                                                                                        | 152.3             | 180.3             | 8.4                     | 5.5                      | 1.5                            |
| 275.0   | 154.2                                                                                                        | 141.1             | 167.3             | 8.5                     | 5.7                      | 1.5                            |
| 280.0   | 143.2                                                                                                        | 130.9             | 155.5             | 8.6                     | 5.8                      | 1.5                            |
| 285.0   | 133.2                                                                                                        | 121.7             | 144.7             | 8.6                     | 6.0                      | 1.4                            |
| 290.0   | 124.0                                                                                                        | 113.2             | 134.8             | 8.7                     | 6.1                      | 1.4                            |
| 295.0   | 115.5                                                                                                        | 105.4             | 125.7             | 8.8                     | 6.3                      | 1.4                            |
| 300.0   | 107.8                                                                                                        | 98.29             | 117.4             | 8.8                     | 6.4                      | 1.4                            |

|         | <b>B57560G0104H000</b>                                                                                       |                   |                   |                         |                          |                                |
|---------|--------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|--------------------------|--------------------------------|
| R/T No. | 8404                                                                                                         |                   |                   |                         |                          |                                |
| T (°C)  | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \Omega$ , $T_R = 25 \text{ °C}$ , $\Delta R_R/R_R = \pm 3\%$ |                   |                   |                         |                          |                                |
|         | $R_{nom}[\Omega]$                                                                                            | $R_{min}[\Omega]$ | $R_{max}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm\text{°C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0   | 9877500                                                                                                      | 9063300           | 10692000          | 8.2                     | 1.1                      | 7.4                            |
| −50.0   | 6864800                                                                                                      | 6329700           | 7399900           | 7.8                     | 1.1                      | 7.1                            |
| −45.0   | 4833700                                                                                                      | 4477500           | 5189800           | 7.4                     | 1.1                      | 6.9                            |
| −40.0   | 3445800                                                                                                      | 3205900           | 3685600           | 7.0                     | 1.0                      | 6.7                            |
| −35.0   | 2485200                                                                                                      | 2321800           | 2648600           | 6.6                     | 1.0                      | 6.4                            |
| −30.0   | 1812400                                                                                                      | 1699900           | 1924800           | 6.2                     | 1.0                      | 6.2                            |
| −25.0   | 1335600                                                                                                      | 1257500           | 1413700           | 5.8                     | 1.0                      | 6.0                            |
| −20.0   | 994130                                                                                                       | 939370            | 1048900           | 5.5                     | 0.9                      | 5.8                            |
| −15.0   | 747000                                                                                                       | 708280            | 785720            | 5.2                     | 0.9                      | 5.6                            |
| −10.0   | 566390                                                                                                       | 538800            | 593980            | 4.9                     | 0.9                      | 5.4                            |
| −5.0    | 433140                                                                                                       | 413340            | 452940            | 4.6                     | 0.9                      | 5.3                            |
| 0.0     | 333960                                                                                                       | 319660            | 348270            | 4.3                     | 0.8                      | 5.2                            |
| 5.0     | 258500                                                                                                       | 248140            | 268860            | 4.0                     | 0.8                      | 5.0                            |
| 10.0    | 201660                                                                                                       | 194120            | 209200            | 3.7                     | 0.8                      | 4.9                            |
| 15.0    | 158500                                                                                                       | 152980            | 164020            | 3.5                     | 0.7                      | 4.7                            |

|             | <b>B57560G0104H000</b>                                                                                                  |                      |                      |                                      |            |            |
|-------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8404                                                                                                                    |                      |                      |                                      |            |            |
| T (°C)      | B <sub>0/100</sub> = 4036 K, R <sub>25</sub> = 100000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                    | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 20.0        | 125470                                                                                                                  | 121410               | 129530               | 3.2                                  | 0.7        | 4.6        |
| <b>25.0</b> | <b>100000</b>                                                                                                           | <b>97000</b>         | <b>103000</b>        | <b>3.0</b>                           | <b>0.7</b> | <b>4.5</b> |
| 30.0        | 80223                                                                                                                   | 77631                | 82814                | 3.2                                  | 0.7        | 4.3        |
| 35.0        | 64759                                                                                                                   | 62523                | 66995                | 3.5                                  | 0.8        | 4.2        |
| 40.0        | 52589                                                                                                                   | 50659                | 54519                | 3.7                                  | 0.9        | 4.1        |
| 45.0        | 42951                                                                                                                   | 41284                | 44618                | 3.9                                  | 1.0        | 4.0        |
| 50.0        | 35272                                                                                                                   | 33832                | 36713                | 4.1                                  | 1.1        | 3.9        |
| 55.0        | 29119                                                                                                                   | 27872                | 30366                | 4.3                                  | 1.1        | 3.8        |
| 60.0        | 24161                                                                                                                   | 23080                | 25242                | 4.5                                  | 1.2        | 3.7        |
| 65.0        | 20144                                                                                                                   | 19205                | 21084                | 4.7                                  | 1.3        | 3.6        |
| 70.0        | 16874                                                                                                                   | 16057                | 17692                | 4.8                                  | 1.4        | 3.5        |
| 75.0        | 14198                                                                                                                   | 13485                | 14911                | 5.0                                  | 1.5        | 3.4        |
| 80.0        | 11998                                                                                                                   | 11375                | 12622                | 5.2                                  | 1.6        | 3.3        |
| 85.0        | 10181                                                                                                                   | 9635                 | 10727                | 5.4                                  | 1.7        | 3.2        |
| 90.0        | 8674                                                                                                                    | 8195                 | 9154                 | 5.5                                  | 1.7        | 3.2        |
| 95.0        | 7419                                                                                                                    | 6997                 | 7841                 | 5.7                                  | 1.8        | 3.1        |
| 100.0       | 6369                                                                                                                    | 5997                 | 6741                 | 5.8                                  | 1.9        | 3.0        |
| 105.0       | 5487                                                                                                                    | 5158                 | 5816                 | 6.0                                  | 2.0        | 2.9        |
| 110.0       | 4744                                                                                                                    | 4452                 | 5035                 | 6.1                                  | 2.1        | 2.9        |
| 115.0       | 4115                                                                                                                    | 3856                 | 4373                 | 6.3                                  | 2.2        | 2.8        |
| 120.0       | 3581                                                                                                                    | 3351                 | 3811                 | 6.4                                  | 2.3        | 2.7        |
| 125.0       | 3126                                                                                                                    | 2921                 | 3331                 | 6.6                                  | 2.4        | 2.7        |
| 130.0       | 2737                                                                                                                    | 2554                 | 2920                 | 6.7                                  | 2.5        | 2.6        |
| 135.0       | 2404                                                                                                                    | 2239                 | 2568                 | 6.8                                  | 2.7        | 2.6        |
| 140.0       | 2117                                                                                                                    | 1969                 | 2264                 | 7.0                                  | 2.8        | 2.5        |
| 145.0       | 1869                                                                                                                    | 1737                 | 2001                 | 7.1                                  | 2.9        | 2.5        |
| 150.0       | 1655                                                                                                                    | 1536                 | 1774                 | 7.2                                  | 3.0        | 2.4        |
| 155.0       | 1469                                                                                                                    | 1362                 | 1577                 | 7.3                                  | 3.1        | 2.4        |
| 160.0       | 1307                                                                                                                    | 1210                 | 1405                 | 7.4                                  | 3.2        | 2.3        |
| 165.0       | 1166                                                                                                                    | 1078                 | 1254                 | 7.6                                  | 3.3        | 2.3        |
| 170.0       | 1043                                                                                                                    | 962.8                | 1123                 | 7.7                                  | 3.5        | 2.2        |
| 175.0       | 934.5                                                                                                                   | 861.8                | 1007                 | 7.8                                  | 3.6        | 2.2        |
| 180.0       | 839.3                                                                                                                   | 773.1                | 905.4                | 7.9                                  | 3.7        | 2.1        |
| 185.0       | 755.4                                                                                                                   | 695.1                | 815.7                | 8.0                                  | 3.8        | 2.1        |
| 190.0       | 681.3                                                                                                                   | 626.2                | 736.5                | 8.1                                  | 4.0        | 2.0        |
| 195.0       | 615.8                                                                                                                   | 565.4                | 666.2                | 8.2                                  | 4.1        | 2.0        |
| 200.0       | 557.6                                                                                                                   | 511.4                | 603.8                | 8.3                                  | 4.2        | 2.0        |
| 205.0       | 505.9                                                                                                                   | 463.5                | 548.3                | 8.4                                  | 4.4        | 1.9        |
| 210.0       | 459.9                                                                                                                   | 420.9                | 498.9                | 8.5                                  | 4.5        | 1.9        |
| 215.0       | 418.8                                                                                                                   | 382.9                | 454.7                | 8.6                                  | 4.6        | 1.9        |

|         | <b>B57560G0104H000</b>                                                                                                             |                     |                     |                         |                               |                                |
|---------|------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8404                                                                                                                               |                     |                     |                         |                               |                                |
| T (°C)  | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                     |                     |                         |                               |                                |
|         | $R_{nom}[ \Omega ]$                                                                                                                | $R_{min}[ \Omega ]$ | $R_{max}[ \Omega ]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 220.0   | 382.0                                                                                                                              | 348.9               | 415.1               | 8.7                     | 4.8                           | 1.8                            |
| 225.0   | 349.1                                                                                                                              | 318.5               | 379.6               | 8.8                     | 4.9                           | 1.8                            |
| 230.0   | 319.5                                                                                                                              | 291.2               | 347.7               | 8.8                     | 5.0                           | 1.8                            |
| 235.0   | 292.9                                                                                                                              | 266.8               | 319.0               | 8.9                     | 5.2                           | 1.7                            |
| 240.0   | 269.0                                                                                                                              | 244.7               | 293.2               | 9.0                     | 5.3                           | 1.7                            |
| 245.0   | 247.3                                                                                                                              | 224.8               | 269.8               | 9.1                     | 5.5                           | 1.7                            |
| 250.0   | 227.8                                                                                                                              | 206.9               | 248.7               | 9.2                     | 5.6                           | 1.6                            |
| 255.0   | 210.1                                                                                                                              | 190.7               | 229.6               | 9.3                     | 5.8                           | 1.6                            |
| 260.0   | 194.1                                                                                                                              | 176.0               | 212.2               | 9.3                     | 5.9                           | 1.6                            |
| 265.0   | 179.5                                                                                                                              | 162.6               | 196.4               | 9.4                     | 6.1                           | 1.5                            |
| 270.0   | 166.3                                                                                                                              | 150.5               | 182.0               | 9.5                     | 6.2                           | 1.5                            |
| 275.0   | 154.2                                                                                                                              | 139.5               | 169.0               | 9.6                     | 6.4                           | 1.5                            |
| 280.0   | 143.2                                                                                                                              | 129.4               | 157.0               | 9.6                     | 6.6                           | 1.5                            |
| 285.0   | 133.2                                                                                                                              | 120.2               | 146.1               | 9.7                     | 6.7                           | 1.4                            |
| 290.0   | 124.0                                                                                                                              | 111.8               | 136.1               | 9.8                     | 6.9                           | 1.4                            |
| 295.0   | 115.5                                                                                                                              | 104.2               | 126.9               | 9.8                     | 7.1                           | 1.4                            |
| 300.0   | 107.8                                                                                                                              | 97.14               | 118.5               | 9.9                     | 7.2                           | 1.4                            |

|             | <b>B57560G0104J000</b>                                                                                                             |                     |                     |                         |                               |                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.     | 8404                                                                                                                               |                     |                     |                         |                               |                                |
| T (°C)      | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                     |                     |                         |                               |                                |
|             | $R_{nom}[ \Omega ]$                                                                                                                | $R_{min}[ \Omega ]$ | $R_{max}[ \Omega ]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0       | 9877500                                                                                                                            | 8855700             | 10899000            | 10.3                    | 1.4                           | 7.4                            |
| −50.0       | 6864800                                                                                                                            | 6186000             | 7543500             | 9.9                     | 1.4                           | 7.1                            |
| −45.0       | 4833700                                                                                                                            | 4376800             | 5290600             | 9.5                     | 1.4                           | 6.9                            |
| −40.0       | 3445800                                                                                                                            | 3134300             | 3757200             | 9.0                     | 1.4                           | 6.7                            |
| −35.0       | 2485200                                                                                                                            | 2270400             | 2700000             | 8.6                     | 1.3                           | 6.4                            |
| −30.0       | 1812400                                                                                                                            | 1662600             | 1962100             | 8.3                     | 1.3                           | 6.2                            |
| −25.0       | 1335600                                                                                                                            | 1230100             | 1441200             | 7.9                     | 1.3                           | 6.0                            |
| −20.0       | 994130                                                                                                                             | 919000              | 1069300             | 7.6                     | 1.3                           | 5.8                            |
| −15.0       | 747000                                                                                                                             | 693030              | 800980              | 7.2                     | 1.3                           | 5.6                            |
| −10.0       | 566390                                                                                                                             | 527260              | 605510              | 6.9                     | 1.3                           | 5.4                            |
| −5.0        | 433140                                                                                                                             | 404540              | 461740              | 6.6                     | 1.3                           | 5.3                            |
| 0.0         | 333960                                                                                                                             | 312890              | 355030              | 6.3                     | 1.2                           | 5.2                            |
| 5.0         | 258500                                                                                                                             | 242920              | 274080              | 6.0                     | 1.2                           | 5.0                            |
| 10.0        | 201660                                                                                                                             | 190050              | 213270              | 5.8                     | 1.2                           | 4.9                            |
| 15.0        | 158500                                                                                                                             | 149790              | 167210              | 5.5                     | 1.2                           | 4.7                            |
| 20.0        | 125470                                                                                                                             | 118890              | 132050              | 5.2                     | 1.1                           | 4.6                            |
| <b>25.0</b> | <b>100000</b>                                                                                                                      | <b>95000</b>        | <b>105000</b>       | <b>5.0</b>              | <b>1.1</b>                    | <b>4.5</b>                     |



**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

|         | <b>B57560G0104J000</b>                                                                                                  |                      |                      |                                      |         |         |
|---------|-------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8404                                                                                                                    |                      |                      |                                      |         |         |
| T (°C)  | B <sub>0/100</sub> = 4036 K, R <sub>25</sub> = 100000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |         |         |
|         | R <sub>nom</sub> [Ω]                                                                                                    | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 30.0    | 80223                                                                                                                   | 76023                | 84422                | 5.2                                  | 1.2     | 4.3     |
| 35.0    | 64759                                                                                                                   | 61222                | 68296                | 5.5                                  | 1.3     | 4.2     |
| 40.0    | 52589                                                                                                                   | 49600                | 55578                | 5.7                                  | 1.4     | 4.1     |
| 45.0    | 42951                                                                                                                   | 40418                | 45484                | 5.9                                  | 1.5     | 4.0     |
| 50.0    | 35272                                                                                                                   | 33119                | 37426                | 6.1                                  | 1.6     | 3.9     |
| 55.0    | 29119                                                                                                                   | 27282                | 30956                | 6.3                                  | 1.7     | 3.8     |
| 60.0    | 24161                                                                                                                   | 22589                | 25732                | 6.5                                  | 1.8     | 3.7     |
| 65.0    | 20144                                                                                                                   | 18796                | 21493                | 6.7                                  | 1.9     | 3.6     |
| 70.0    | 16874                                                                                                                   | 15713                | 18035                | 6.9                                  | 2.0     | 3.5     |
| 75.0    | 14198                                                                                                                   | 13196                | 15201                | 7.1                                  | 2.1     | 3.4     |
| 80.0    | 11998                                                                                                                   | 11130                | 12867                | 7.2                                  | 2.2     | 3.3     |
| 85.0    | 10181                                                                                                                   | 9427                 | 10936                | 7.4                                  | 2.3     | 3.2     |
| 90.0    | 8674                                                                                                                    | 8017                 | 9331                 | 7.6                                  | 2.4     | 3.2     |
| 95.0    | 7419                                                                                                                    | 6845                 | 7993                 | 7.7                                  | 2.5     | 3.1     |
| 100.0   | 6369                                                                                                                    | 5866                 | 6872                 | 7.9                                  | 2.6     | 3.0     |
| 105.0   | 5487                                                                                                                    | 5045                 | 5929                 | 8.1                                  | 2.7     | 2.9     |
| 110.0   | 4744                                                                                                                    | 4355                 | 5133                 | 8.2                                  | 2.9     | 2.9     |
| 115.0   | 4115                                                                                                                    | 3771                 | 4458                 | 8.3                                  | 3.0     | 2.8     |
| 120.0   | 3581                                                                                                                    | 3277                 | 3885                 | 8.5                                  | 3.1     | 2.7     |
| 125.0   | 3126                                                                                                                    | 2856                 | 3396                 | 8.6                                  | 3.2     | 2.7     |
| 130.0   | 2737                                                                                                                    | 2497                 | 2977                 | 8.8                                  | 3.3     | 2.6     |
| 135.0   | 2404                                                                                                                    | 2190                 | 2617                 | 8.9                                  | 3.5     | 2.6     |
| 140.0   | 2117                                                                                                                    | 1925                 | 2308                 | 9.0                                  | 3.6     | 2.5     |
| 145.0   | 1869                                                                                                                    | 1698                 | 2040                 | 9.2                                  | 3.7     | 2.5     |
| 150.0   | 1655                                                                                                                    | 1501                 | 1809                 | 9.3                                  | 3.9     | 2.4     |
| 155.0   | 1469                                                                                                                    | 1331                 | 1607                 | 9.4                                  | 4.0     | 2.4     |
| 160.0   | 1307                                                                                                                    | 1183                 | 1432                 | 9.5                                  | 4.1     | 2.3     |
| 165.0   | 1166                                                                                                                    | 1054                 | 1279                 | 9.6                                  | 4.3     | 2.3     |
| 170.0   | 1043                                                                                                                    | 941.0                | 1144                 | 9.8                                  | 4.4     | 2.2     |
| 175.0   | 934.5                                                                                                                   | 842.3                | 1027                 | 9.9                                  | 4.5     | 2.2     |
| 180.0   | 839.3                                                                                                                   | 755.6                | 923.0                | 10.0                                 | 4.7     | 2.1     |
| 185.0   | 755.4                                                                                                                   | 679.2                | 831.6                | 10.1                                 | 4.8     | 2.1     |
| 190.0   | 681.3                                                                                                                   | 611.9                | 750.8                | 10.2                                 | 5.0     | 2.0     |
| 195.0   | 615.8                                                                                                                   | 552.4                | 679.1                | 10.3                                 | 5.1     | 2.0     |
| 200.0   | 557.6                                                                                                                   | 499.7                | 615.6                | 10.4                                 | 5.3     | 2.0     |
| 205.0   | 505.9                                                                                                                   | 452.9                | 559.0                | 10.5                                 | 5.4     | 1.9     |
| 210.0   | 459.9                                                                                                                   | 411.2                | 508.5                | 10.6                                 | 5.6     | 1.9     |
| 215.0   | 418.8                                                                                                                   | 374.0                | 463.5                | 10.7                                 | 5.8     | 1.9     |
| 220.0   | 382.0                                                                                                                   | 340.8                | 423.1                | 10.8                                 | 5.9     | 1.8     |
| 225.0   | 349.1                                                                                                                   | 311.1                | 387.0                | 10.9                                 | 6.1     | 1.8     |

| B57560G0104J000 |                                                                                                                                    |                           |                           |                         |                               |                          |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No.         | 8404                                                                                                                               |                           |                           |                         |                               |                          |
| T (°C)          | $B_{0/100} = 4036 \text{ K}$ , $R_{25} = 100000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                           |                           |                         |                               |                          |
|                 | $R_{\text{nomL}}[\Omega]$                                                                                                          | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| 230.0           | 319.5                                                                                                                              | 284.5                     | 354.5                     | 11.0                    | 6.2                           | 1.8                      |
| 235.0           | 292.9                                                                                                                              | 260.6                     | 325.2                     | 11.0                    | 6.4                           | 1.7                      |
| 240.0           | 269.0                                                                                                                              | 239.0                     | 298.9                     | 11.1                    | 6.6                           | 1.7                      |
| 245.0           | 247.3                                                                                                                              | 219.6                     | 275.1                     | 11.2                    | 6.8                           | 1.7                      |
| 250.0           | 227.8                                                                                                                              | 202.1                     | 253.5                     | 11.3                    | 6.9                           | 1.6                      |
| 255.0           | 210.1                                                                                                                              | 186.2                     | 234.0                     | 11.4                    | 7.1                           | 1.6                      |
| 260.0           | 194.1                                                                                                                              | 171.9                     | 216.3                     | 11.5                    | 7.3                           | 1.6                      |
| 265.0           | 179.5                                                                                                                              | 158.8                     | 200.2                     | 11.5                    | 7.5                           | 1.5                      |
| 270.0           | 166.3                                                                                                                              | 147.0                     | 185.6                     | 11.6                    | 7.6                           | 1.5                      |
| 275.0           | 154.2                                                                                                                              | 136.2                     | 172.2                     | 11.7                    | 7.8                           | 1.5                      |
| 280.0           | 143.2                                                                                                                              | 126.4                     | 160.1                     | 11.8                    | 8.0                           | 1.5                      |
| 285.0           | 133.2                                                                                                                              | 117.4                     | 148.9                     | 11.8                    | 8.2                           | 1.4                      |
| 290.0           | 124.0                                                                                                                              | 109.2                     | 138.7                     | 11.9                    | 8.4                           | 1.4                      |
| 295.0           | 115.5                                                                                                                              | 101.7                     | 129.4                     | 12.0                    | 8.6                           | 1.4                      |
| 300.0           | 107.8                                                                                                                              | 94.84                     | 120.8                     | 12.0                    | 8.8                           | 1.4                      |

| B57560G0234F000 |                                                                                                                                      |                           |                           |                         |                               |                          |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No.         | 8405                                                                                                                                 |                           |                           |                         |                               |                          |
| T (°C)          | $B_{100/200} = 4537 \text{ K}$ , $R_{25} = 230000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                           |                           |                         |                               |                          |
|                 | $R_{\text{nomL}}[\Omega]$                                                                                                            | $R_{\text{minL}}[\Omega]$ | $R_{\text{maxL}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| -55.0           | 28088000                                                                                                                             | 26179000                  | 29997000                  | 6.8                     | 0.9                           | 7.8                      |
| -50.0           | 19160000                                                                                                                             | 17953000                  | 20367000                  | 6.3                     | 0.8                           | 7.5                      |
| -45.0           | 13253000                                                                                                                             | 12480000                  | 14025000                  | 5.8                     | 0.8                           | 7.2                      |
| -40.0           | 9286900                                                                                                                              | 8787500                   | 9786200                   | 5.4                     | 0.8                           | 7.0                      |
| -35.0           | 6588800                                                                                                                              | 6262800                   | 6914700                   | 4.9                     | 0.7                           | 6.7                      |
| -30.0           | 4729500                                                                                                                              | 4514900                   | 4944100                   | 4.5                     | 0.7                           | 6.5                      |
| -25.0           | 3432700                                                                                                                              | 3290400                   | 3575000                   | 4.1                     | 0.7                           | 6.3                      |
| -20.0           | 2517800                                                                                                                              | 2422900                   | 2612700                   | 3.8                     | 0.6                           | 6.1                      |
| -15.0           | 1865300                                                                                                                              | 1801700                   | 1928900                   | 3.4                     | 0.6                           | 5.9                      |
| -10.0           | 1395100                                                                                                                              | 1352300                   | 1437800                   | 3.1                     | 0.5                           | 5.7                      |
| -5.0            | 1052900                                                                                                                              | 1024100                   | 1081600                   | 2.7                     | 0.5                           | 5.5                      |
| 0.0             | 801440                                                                                                                               | 782080                    | 820810                    | 2.4                     | 0.4                           | 5.4                      |
| 5.0             | 615090                                                                                                                               | 602110                    | 628080                    | 2.1                     | 0.4                           | 5.2                      |
| 10.0            | 475780                                                                                                                               | 467140                    | 484430                    | 1.8                     | 0.4                           | 5.1                      |
| 15.0            | 370790                                                                                                                               | 365100                    | 376480                    | 1.5                     | 0.3                           | 4.9                      |
| 20.0            | 291030                                                                                                                               | 287360                    | 294710                    | 1.3                     | 0.3                           | 4.8                      |
| <b>25.0</b>     | <b>230000</b>                                                                                                                        | <b>227700</b>             | <b>232300</b>             | <b>1.0</b>              | <b>0.2</b>                    | <b>4.6</b>               |
| 30.0            | 182960                                                                                                                               | 180670                    | 185250                    | 1.3                     | 0.3                           | 4.5                      |
| 35.0            | 146460                                                                                                                               | 144260                    | 148650                    | 1.5                     | 0.3                           | 4.4                      |

|         | B57560G0234F000                                                                                                                      |                          |                          |                         |                               |                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------|-------------------------------|--------------------------|
| R/T No. | 8405                                                                                                                                 |                          |                          |                         |                               |                          |
| T (°C)  | $B_{100/200} = 4537 \text{ K}$ , $R_{25} = 230000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 1\%$ |                          |                          |                         |                               |                          |
|         | $R_{\text{nom}}[\Omega]$                                                                                                             | $R_{\text{min}}[\Omega]$ | $R_{\text{max}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ } (\%/K)$ |
| 40.0    | 117940                                                                                                                               | 115890                   | 119990                   | 1.7                     | 0.4                           | 4.3                      |
| 45.0    | 95528                                                                                                                                | 93646                    | 97411                    | 2.0                     | 0.5                           | 4.2                      |
| 50.0    | 77804                                                                                                                                | 76095                    | 79512                    | 2.2                     | 0.5                           | 4.1                      |
| 55.0    | 63706                                                                                                                                | 62167                    | 65244                    | 2.4                     | 0.6                           | 3.9                      |
| 60.0    | 52429                                                                                                                                | 51052                    | 53807                    | 2.6                     | 0.7                           | 3.8                      |
| 65.0    | 43361                                                                                                                                | 42132                    | 44591                    | 2.8                     | 0.8                           | 3.7                      |
| 70.0    | 36032                                                                                                                                | 34938                    | 37126                    | 3.0                     | 0.8                           | 3.7                      |
| 75.0    | 30078                                                                                                                                | 29106                    | 31050                    | 3.2                     | 0.9                           | 3.6                      |
| 80.0    | 25218                                                                                                                                | 24355                    | 26081                    | 3.4                     | 1.0                           | 3.5                      |
| 85.0    | 21233                                                                                                                                | 20467                    | 21999                    | 3.6                     | 1.1                           | 3.4                      |
| 90.0    | 17951                                                                                                                                | 17271                    | 18631                    | 3.8                     | 1.1                           | 3.3                      |
| 95.0    | 15236                                                                                                                                | 14632                    | 15840                    | 4.0                     | 1.2                           | 3.2                      |
| 100.0   | 12981                                                                                                                                | 12444                    | 13518                    | 4.1                     | 1.3                           | 3.2                      |
| 105.0   | 11100                                                                                                                                | 10622                    | 11578                    | 4.3                     | 1.4                           | 3.1                      |
| 110.0   | 9526                                                                                                                                 | 9100                     | 9951                     | 4.5                     | 1.5                           | 3.0                      |
| 115.0   | 8203                                                                                                                                 | 7823                     | 8582                     | 4.6                     | 1.6                           | 3.0                      |
| 120.0   | 7087                                                                                                                                 | 6748                     | 7426                     | 4.8                     | 1.7                           | 2.9                      |
| 125.0   | 6142                                                                                                                                 | 5839                     | 6445                     | 4.9                     | 1.7                           | 2.8                      |
| 130.0   | 5340                                                                                                                                 | 5069                     | 5612                     | 5.1                     | 1.8                           | 2.8                      |
| 135.0   | 4657                                                                                                                                 | 4413                     | 4900                     | 5.2                     | 1.9                           | 2.7                      |
| 140.0   | 4073                                                                                                                                 | 3854                     | 4291                     | 5.4                     | 2.0                           | 2.7                      |
| 145.0   | 3572                                                                                                                                 | 3375                     | 3769                     | 5.5                     | 2.1                           | 2.6                      |
| 150.0   | 3141                                                                                                                                 | 2964                     | 3319                     | 5.6                     | 2.2                           | 2.5                      |
| 155.0   | 2770                                                                                                                                 | 2610                     | 2930                     | 5.8                     | 2.3                           | 2.5                      |
| 160.0   | 2449                                                                                                                                 | 2304                     | 2593                     | 5.9                     | 2.4                           | 2.4                      |
| 165.0   | 2170                                                                                                                                 | 2039                     | 2301                     | 6.0                     | 2.5                           | 2.4                      |
| 170.0   | 1928                                                                                                                                 | 1809                     | 2047                     | 6.2                     | 2.6                           | 2.3                      |
| 175.0   | 1717                                                                                                                                 | 1609                     | 1825                     | 6.3                     | 2.7                           | 2.3                      |
| 180.0   | 1532                                                                                                                                 | 1434                     | 1631                     | 6.4                     | 2.8                           | 2.3                      |
| 185.0   | 1371                                                                                                                                 | 1282                     | 1460                     | 6.5                     | 3.0                           | 2.2                      |
| 190.0   | 1229                                                                                                                                 | 1147                     | 1310                     | 6.6                     | 3.1                           | 2.2                      |
| 195.0   | 1104                                                                                                                                 | 1030                     | 1178                     | 6.7                     | 3.2                           | 2.1                      |
| 200.0   | 993.8                                                                                                                                | 925.7                    | 1062                     | 6.8                     | 3.3                           | 2.1                      |
| 205.0   | 896.4                                                                                                                                | 834.0                    | 958.7                    | 7.0                     | 3.4                           | 2.0                      |
| 210.0   | 810.0                                                                                                                                | 752.9                    | 867.2                    | 7.1                     | 3.5                           | 2.0                      |
| 215.0   | 733.4                                                                                                                                | 680.9                    | 786.0                    | 7.2                     | 3.6                           | 2.0                      |
| 220.0   | 665.3                                                                                                                                | 616.9                    | 713.6                    | 7.3                     | 3.8                           | 1.9                      |
| 225.0   | 604.5                                                                                                                                | 560.0                    | 649.0                    | 7.4                     | 3.9                           | 1.9                      |
| 230.0   | 550.3                                                                                                                                | 509.2                    | 591.3                    | 7.5                     | 4.0                           | 1.9                      |
| 235.0   | 501.8                                                                                                                                | 463.8                    | 539.7                    | 7.6                     | 4.1                           | 1.8                      |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0234F000</b> |                                                                                                                           |                      |                      |                                      |         |         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8405                                                                                                                      |                      |                      |                                      |         |         |
| T (°C)                 | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |         |         |
|                        | R <sub>nom</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 240.0                  | 458.3                                                                                                                     | 423.2                | 493.3                | 7.6                                  | 4.3     | 1.8     |
| 245.0                  | 419.2                                                                                                                     | 386.8                | 451.7                | 7.7                                  | 4.4     | 1.8     |
| 250.0                  | 384.1                                                                                                                     | 354.0                | 414.2                | 7.8                                  | 4.5     | 1.7     |
| 255.0                  | 352.5                                                                                                                     | 324.5                | 380.4                | 7.9                                  | 4.6     | 1.7     |
| 260.0                  | 323.9                                                                                                                     | 298.0                | 349.8                | 8.0                                  | 4.8     | 1.7     |
| 265.0                  | 298.1                                                                                                                     | 274.0                | 322.2                | 8.1                                  | 4.9     | 1.6     |
| 270.0                  | 274.8                                                                                                                     | 252.3                | 297.2                | 8.2                                  | 5.1     | 1.6     |
| 275.0                  | 253.6                                                                                                                     | 232.6                | 274.5                | 8.3                                  | 5.2     | 1.6     |
| 280.0                  | 234.4                                                                                                                     | 214.8                | 253.9                | 8.3                                  | 5.3     | 1.6     |
| 285.0                  | 216.9                                                                                                                     | 198.6                | 235.1                | 8.4                                  | 5.5     | 1.5     |
| 290.0                  | 201.0                                                                                                                     | 183.9                | 218.0                | 8.5                                  | 5.6     | 1.5     |
| 295.0                  | 186.4                                                                                                                     | 170.5                | 202.4                | 8.6                                  | 5.8     | 1.5     |
| 300.0                  | 173.2                                                                                                                     | 158.2                | 188.2                | 8.7                                  | 5.9     | 1.5     |

| <b>B57560G0234G000</b> |                                                                                                                           |                      |                      |                                      |            |            |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8405                                                                                                                      |                      |                      |                                      |            |            |
| T (°C)                 | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|                        | R <sub>nom</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 28088000                                                                                                                  | 25882000             | 30294000             | 7.9                                  | 1.0        | 7.8        |
| -50.0                  | 19160000                                                                                                                  | 17752000             | 20569000             | 7.4                                  | 1.0        | 7.5        |
| -45.0                  | 13253000                                                                                                                  | 12341000             | 14164000             | 6.9                                  | 0.9        | 7.2        |
| -40.0                  | 9286900                                                                                                                   | 8690600              | 9883100              | 6.4                                  | 0.9        | 7.0        |
| -35.0                  | 6588800                                                                                                                   | 6194300              | 6983200              | 6.0                                  | 0.9        | 6.7        |
| -30.0                  | 4729500                                                                                                                   | 4466000              | 4993000              | 5.6                                  | 0.9        | 6.5        |
| -25.0                  | 3432700                                                                                                                   | 3255100              | 3610400              | 5.2                                  | 0.8        | 6.3        |
| -20.0                  | 2517800                                                                                                                   | 2397100              | 2638600              | 4.8                                  | 0.8        | 6.1        |
| -15.0                  | 1865300                                                                                                                   | 1782600              | 1948000              | 4.4                                  | 0.8        | 5.9        |
| -10.0                  | 1395100                                                                                                                   | 1338100              | 1452100              | 4.1                                  | 0.7        | 5.7        |
| -5.0                   | 1052900                                                                                                                   | 1013400              | 1092300              | 3.8                                  | 0.7        | 5.5        |
| 0.0                    | 801440                                                                                                                    | 773950               | 828940               | 3.4                                  | 0.6        | 5.4        |
| 5.0                    | 615090                                                                                                                    | 595890               | 634300               | 3.1                                  | 0.6        | 5.2        |
| 10.0                   | 475780                                                                                                                    | 462340               | 489230               | 2.8                                  | 0.6        | 5.1        |
| 15.0                   | 370790                                                                                                                    | 361370               | 380200               | 2.5                                  | 0.5        | 4.9        |
| 20.0                   | 291030                                                                                                                    | 284440               | 297620               | 2.3                                  | 0.5        | 4.8        |
| <b>25.0</b>            | <b>230000</b>                                                                                                             | <b>225400</b>        | <b>234600</b>        | <b>2.0</b>                           | <b>0.4</b> | <b>4.6</b> |
| 30.0                   | 182960                                                                                                                    | 178830               | 187090               | 2.3                                  | 0.5        | 4.5        |
| 35.0                   | 146460                                                                                                                    | 142790               | 150130               | 2.5                                  | 0.6        | 4.4        |
| 40.0                   | 117940                                                                                                                    | 114700               | 121180               | 2.7                                  | 0.6        | 4.3        |
| 45.0                   | 95528                                                                                                                     | 92681                | 98376                | 3.0                                  | 0.7        | 4.2        |

|         | <b>B57560G0234G000</b>                                                                                                    |                      |                      |                                      |         |         |
|---------|---------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8405                                                                                                                      |                      |                      |                                      |         |         |
| T (°C)  | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |         |         |
|         | R <sub>nom</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 50.0    | 77804                                                                                                                     | 75308                | 80300                | 3.2                                  | 0.8     | 4.1     |
| 55.0    | 63706                                                                                                                     | 61521                | 65890                | 3.4                                  | 0.9     | 3.9     |
| 60.0    | 52429                                                                                                                     | 50519                | 54340                | 3.6                                  | 0.9     | 3.8     |
| 65.0    | 43361                                                                                                                     | 41691                | 45032                | 3.9                                  | 1.0     | 3.7     |
| 70.0    | 36032                                                                                                                     | 34571                | 37493                | 4.1                                  | 1.1     | 3.7     |
| 75.0    | 30078                                                                                                                     | 28799                | 31357                | 4.3                                  | 1.2     | 3.6     |
| 80.0    | 25218                                                                                                                     | 24097                | 26340                | 4.4                                  | 1.3     | 3.5     |
| 85.0    | 21233                                                                                                                     | 20249                | 22217                | 4.6                                  | 1.4     | 3.4     |
| 90.0    | 17951                                                                                                                     | 17087                | 18816                | 4.8                                  | 1.5     | 3.3     |
| 95.0    | 15236                                                                                                                     | 14475                | 15997                | 5.0                                  | 1.5     | 3.2     |
| 100.0   | 12981                                                                                                                     | 12310                | 13652                | 5.2                                  | 1.6     | 3.2     |
| 105.0   | 11100                                                                                                                     | 10508                | 11693                | 5.3                                  | 1.7     | 3.1     |
| 110.0   | 9526                                                                                                                      | 9002                 | 10050                | 5.5                                  | 1.8     | 3.0     |
| 115.0   | 8203                                                                                                                      | 7738                 | 8667                 | 5.7                                  | 1.9     | 3.0     |
| 120.0   | 7087                                                                                                                      | 6674                 | 7499                 | 5.8                                  | 2.0     | 2.9     |
| 125.0   | 6142                                                                                                                      | 5775                 | 6509                 | 6.0                                  | 2.1     | 2.8     |
| 130.0   | 5340                                                                                                                      | 5013                 | 5667                 | 6.1                                  | 2.2     | 2.8     |
| 135.0   | 4657                                                                                                                      | 4365                 | 4949                 | 6.3                                  | 2.3     | 2.7     |
| 140.0   | 4073                                                                                                                      | 3812                 | 4334                 | 6.4                                  | 2.4     | 2.7     |
| 145.0   | 3572                                                                                                                      | 3338                 | 3806                 | 6.6                                  | 2.5     | 2.6     |
| 150.0   | 3141                                                                                                                      | 2931                 | 3351                 | 6.7                                  | 2.6     | 2.5     |
| 155.0   | 2770                                                                                                                      | 2581                 | 2959                 | 6.8                                  | 2.7     | 2.5     |
| 160.0   | 2449                                                                                                                      | 2279                 | 2619                 | 7.0                                  | 2.9     | 2.4     |
| 165.0   | 2170                                                                                                                      | 2017                 | 2324                 | 7.1                                  | 3.0     | 2.4     |
| 170.0   | 1928                                                                                                                      | 1789                 | 2067                 | 7.2                                  | 3.1     | 2.3     |
| 175.0   | 1717                                                                                                                      | 1591                 | 1843                 | 7.3                                  | 3.2     | 2.3     |
| 180.0   | 1532                                                                                                                      | 1418                 | 1647                 | 7.4                                  | 3.3     | 2.3     |
| 185.0   | 1371                                                                                                                      | 1267                 | 1475                 | 7.6                                  | 3.4     | 2.2     |
| 190.0   | 1229                                                                                                                      | 1135                 | 1323                 | 7.7                                  | 3.5     | 2.2     |
| 195.0   | 1104                                                                                                                      | 1018                 | 1190                 | 7.8                                  | 3.7     | 2.1     |
| 200.0   | 993.8                                                                                                                     | 915.2                | 1072                 | 7.9                                  | 3.8     | 2.1     |
| 205.0   | 896.4                                                                                                                     | 824.5                | 968.2                | 8.0                                  | 3.9     | 2.0     |
| 210.0   | 810.0                                                                                                                     | 744.3                | 875.8                | 8.1                                  | 4.0     | 2.0     |
| 215.0   | 733.4                                                                                                                     | 673.1                | 793.7                | 8.2                                  | 4.2     | 2.0     |
| 220.0   | 665.3                                                                                                                     | 609.9                | 720.7                | 8.3                                  | 4.3     | 1.9     |
| 225.0   | 604.5                                                                                                                     | 553.6                | 655.5                | 8.4                                  | 4.4     | 1.9     |
| 230.0   | 550.3                                                                                                                     | 503.4                | 597.2                | 8.5                                  | 4.6     | 1.9     |
| 235.0   | 501.8                                                                                                                     | 458.5                | 545.0                | 8.6                                  | 4.7     | 1.8     |
| 240.0   | 458.3                                                                                                                     | 418.3                | 498.2                | 8.7                                  | 4.8     | 1.8     |
| 245.0   | 419.2                                                                                                                     | 382.3                | 456.1                | 8.8                                  | 5.0     | 1.8     |

## Temperature measurement

B57560

## Glass-encapsulated sensors

G560

|         | <b>B57560G0234G000</b>                                                                                                               |                     |                     |                         |                               |                                |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No. | 8405                                                                                                                                 |                     |                     |                         |                               |                                |
| T (°C)  | $B_{100/200} = 4537 \text{ K}$ , $R_{25} = 230000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 2\%$ |                     |                     |                         |                               |                                |
|         | $R_{nom}[ \Omega ]$                                                                                                                  | $R_{min}[ \Omega ]$ | $R_{max}[ \Omega ]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| 250.0   | 384.1                                                                                                                                | 349.9               | 418.3               | 8.9                     | 5.1                           | 1.7                            |
| 255.0   | 352.5                                                                                                                                | 320.8               | 384.1               | 9.0                     | 5.3                           | 1.7                            |
| 260.0   | 323.9                                                                                                                                | 294.5               | 353.3               | 9.1                     | 5.4                           | 1.7                            |
| 265.0   | 298.1                                                                                                                                | 270.8               | 325.4               | 9.2                     | 5.6                           | 1.6                            |
| 270.0   | 274.8                                                                                                                                | 249.3               | 300.2               | 9.2                     | 5.7                           | 1.6                            |
| 275.0   | 253.6                                                                                                                                | 229.9               | 277.2               | 9.3                     | 5.9                           | 1.6                            |
| 280.0   | 234.4                                                                                                                                | 212.3               | 256.4               | 9.4                     | 6.0                           | 1.6                            |
| 285.0   | 216.9                                                                                                                                | 196.3               | 237.5               | 9.5                     | 6.2                           | 1.5                            |
| 290.0   | 201.0                                                                                                                                | 181.7               | 220.2               | 9.6                     | 6.3                           | 1.5                            |
| 295.0   | 186.4                                                                                                                                | 168.5               | 204.4               | 9.6                     | 6.5                           | 1.5                            |
| 300.0   | 173.2                                                                                                                                | 156.3               | 190.0               | 9.7                     | 6.6                           | 1.5                            |

|             | <b>B57560G0234H000</b>                                                                                                               |                     |                     |                         |                               |                                |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-------------------------|-------------------------------|--------------------------------|
| R/T No.     | 8405                                                                                                                                 |                     |                     |                         |                               |                                |
| T (°C)      | $B_{100/200} = 4537 \text{ K}$ , $R_{25} = 230000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 3\%$ |                     |                     |                         |                               |                                |
|             | $R_{nom}[ \Omega ]$                                                                                                                  | $R_{min}[ \Omega ]$ | $R_{max}[ \Omega ]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha \text{ (}\%/\text{K)}$ |
| −55.0       | 28088000                                                                                                                             | 25585000            | 30591000            | 8.9                     | 1.1                           | 7.8                            |
| −50.0       | 19160000                                                                                                                             | 17550000            | 20771000            | 8.4                     | 1.1                           | 7.5                            |
| −45.0       | 13253000                                                                                                                             | 12203000            | 14303000            | 7.9                     | 1.1                           | 7.2                            |
| −40.0       | 9286900                                                                                                                              | 8593700             | 9980000             | 7.5                     | 1.1                           | 7.0                            |
| −35.0       | 6588800                                                                                                                              | 6125900             | 7051700             | 7.0                     | 1.0                           | 6.7                            |
| −30.0       | 4729500                                                                                                                              | 4417000             | 5042000             | 6.6                     | 1.0                           | 6.5                            |
| −25.0       | 3432700                                                                                                                              | 3219700             | 3645800             | 6.2                     | 1.0                           | 6.3                            |
| −20.0       | 2517800                                                                                                                              | 2371200             | 2664500             | 5.8                     | 1.0                           | 6.1                            |
| −15.0       | 1865300                                                                                                                              | 1763500             | 1967100             | 5.5                     | 0.9                           | 5.9                            |
| −10.0       | 1395100                                                                                                                              | 1323800             | 1466300             | 5.1                     | 0.9                           | 5.7                            |
| −5.0        | 1052900                                                                                                                              | 1002600             | 1103100             | 4.8                     | 0.9                           | 5.5                            |
| 0.0         | 801440                                                                                                                               | 765820              | 837060              | 4.4                     | 0.8                           | 5.4                            |
| 5.0         | 615090                                                                                                                               | 589670              | 640520              | 4.1                     | 0.8                           | 5.2                            |
| 10.0        | 475780                                                                                                                               | 457540              | 494020              | 3.8                     | 0.8                           | 5.1                            |
| 15.0        | 370790                                                                                                                               | 357640              | 383930              | 3.5                     | 0.7                           | 4.9                            |
| 20.0        | 291030                                                                                                                               | 281520              | 300540              | 3.3                     | 0.7                           | 4.8                            |
| <b>25.0</b> | <b>230000</b>                                                                                                                        | <b>223100</b>       | <b>236900</b>       | <b>3.0</b>              | <b>0.6</b>                    | <b>4.6</b>                     |
| 30.0        | 182960                                                                                                                               | 177000              | 188920              | 3.3                     | 0.7                           | 4.5                            |
| 35.0        | 146460                                                                                                                               | 141320              | 151600              | 3.5                     | 0.8                           | 4.4                            |
| 40.0        | 117940                                                                                                                               | 113520              | 122370              | 3.8                     | 0.9                           | 4.3                            |
| 45.0        | 95528                                                                                                                                | 91717               | 99340               | 4.0                     | 1.0                           | 4.2                            |
| 50.0        | 77804                                                                                                                                | 74521               | 81087               | 4.2                     | 1.0                           | 4.1                            |
| 55.0        | 63706                                                                                                                                | 60875               | 66536               | 4.4                     | 1.1                           | 3.9                            |

|         | <b>B57560G0234H000</b>                                                                                                    |                      |                      |                                      |         |         |
|---------|---------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8405                                                                                                                      |                      |                      |                                      |         |         |
| T (°C)  | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |         |         |
|         | R <sub>nom</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 60.0    | 52429                                                                                                                     | 49986                | 54872                | 4.7                                  | 1.2     | 3.8     |
| 65.0    | 43361                                                                                                                     | 41249                | 45474                | 4.9                                  | 1.3     | 3.7     |
| 70.0    | 36032                                                                                                                     | 34203                | 37861                | 5.1                                  | 1.4     | 3.7     |
| 75.0    | 30078                                                                                                                     | 28491                | 31665                | 5.3                                  | 1.5     | 3.6     |
| 80.0    | 25218                                                                                                                     | 23839                | 26598                | 5.5                                  | 1.6     | 3.5     |
| 85.0    | 21233                                                                                                                     | 20032                | 22435                | 5.7                                  | 1.7     | 3.4     |
| 90.0    | 17951                                                                                                                     | 16902                | 19000                | 5.8                                  | 1.8     | 3.3     |
| 95.0    | 15236                                                                                                                     | 14318                | 16154                | 6.0                                  | 1.9     | 3.2     |
| 100.0   | 12981                                                                                                                     | 12176                | 13786                | 6.2                                  | 2.0     | 3.2     |
| 105.0   | 11100                                                                                                                     | 10393                | 11807                | 6.4                                  | 2.1     | 3.1     |
| 110.0   | 9526                                                                                                                      | 8903                 | 10148                | 6.5                                  | 2.2     | 3.0     |
| 115.0   | 8203                                                                                                                      | 7653                 | 8752                 | 6.7                                  | 2.3     | 3.0     |
| 120.0   | 7087                                                                                                                      | 6601                 | 7573                 | 6.9                                  | 2.4     | 2.9     |
| 125.0   | 6142                                                                                                                      | 5711                 | 6573                 | 7.0                                  | 2.5     | 2.8     |
| 130.0   | 5340                                                                                                                      | 4958                 | 5723                 | 7.2                                  | 2.6     | 2.8     |
| 135.0   | 4657                                                                                                                      | 4316                 | 4997                 | 7.3                                  | 2.7     | 2.7     |
| 140.0   | 4073                                                                                                                      | 3769                 | 4376                 | 7.5                                  | 2.8     | 2.7     |
| 145.0   | 3572                                                                                                                      | 3301                 | 3843                 | 7.6                                  | 2.9     | 2.6     |
| 150.0   | 3141                                                                                                                      | 2898                 | 3384                 | 7.7                                  | 3.0     | 2.5     |
| 155.0   | 2770                                                                                                                      | 2552                 | 2988                 | 7.9                                  | 3.2     | 2.5     |
| 160.0   | 2449                                                                                                                      | 2253                 | 2645                 | 8.0                                  | 3.3     | 2.4     |
| 165.0   | 2170                                                                                                                      | 1994                 | 2347                 | 8.1                                  | 3.4     | 2.4     |
| 170.0   | 1928                                                                                                                      | 1769                 | 2087                 | 8.3                                  | 3.5     | 2.3     |
| 175.0   | 1717                                                                                                                      | 1573                 | 1861                 | 8.4                                  | 3.7     | 2.3     |
| 180.0   | 1532                                                                                                                      | 1402                 | 1663                 | 8.5                                  | 3.8     | 2.3     |
| 185.0   | 1371                                                                                                                      | 1253                 | 1489                 | 8.6                                  | 3.9     | 2.2     |
| 190.0   | 1229                                                                                                                      | 1122                 | 1336                 | 8.7                                  | 4.0     | 2.2     |
| 195.0   | 1104                                                                                                                      | 1006                 | 1202                 | 8.9                                  | 4.2     | 2.1     |
| 200.0   | 993.8                                                                                                                     | 904.7                | 1083                 | 9.0                                  | 4.3     | 2.1     |
| 205.0   | 896.4                                                                                                                     | 815.0                | 977.7                | 9.1                                  | 4.4     | 2.0     |
| 210.0   | 810.0                                                                                                                     | 735.7                | 884.4                | 9.2                                  | 4.6     | 2.0     |
| 215.0   | 733.4                                                                                                                     | 665.3                | 801.5                | 9.3                                  | 4.7     | 2.0     |
| 220.0   | 665.3                                                                                                                     | 602.8                | 727.7                | 9.4                                  | 4.9     | 1.9     |
| 225.0   | 604.5                                                                                                                     | 547.2                | 661.9                | 9.5                                  | 5.0     | 1.9     |
| 230.0   | 550.3                                                                                                                     | 497.5                | 603.0                | 9.6                                  | 5.1     | 1.9     |
| 235.0   | 501.8                                                                                                                     | 453.2                | 550.4                | 9.7                                  | 5.3     | 1.8     |
| 240.0   | 458.3                                                                                                                     | 413.4                | 503.1                | 9.8                                  | 5.4     | 1.8     |
| 245.0   | 419.2                                                                                                                     | 377.8                | 460.6                | 9.9                                  | 5.6     | 1.8     |
| 250.0   | 384.1                                                                                                                     | 345.8                | 422.4                | 10.0                                 | 5.7     | 1.7     |
| 255.0   | 352.5                                                                                                                     | 317.0                | 387.9                | 10.1                                 | 5.9     | 1.7     |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

| <b>B57560G0234H000</b> |                                                                                                                           |                       |                       |                                      |         |         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--------------------------------------|---------|---------|
| R/T No.                | 8405                                                                                                                      |                       |                       |                                      |         |         |
| T (°C)                 | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                       |                       |                                      |         |         |
|                        | R <sub>nomL</sub> [Ω]                                                                                                     | R <sub>minL</sub> [Ω] | R <sub>maxL</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 260.0                  | 323.9                                                                                                                     | 291.1                 | 356.8                 | 10.1                                 | 6.1     | 1.7     |
| 265.0                  | 298.1                                                                                                                     | 267.6                 | 328.6                 | 10.2                                 | 6.2     | 1.6     |
| 270.0                  | 274.8                                                                                                                     | 246.4                 | 303.1                 | 10.3                                 | 6.4     | 1.6     |
| 275.0                  | 253.6                                                                                                                     | 227.2                 | 280.0                 | 10.4                                 | 6.5     | 1.6     |
| 280.0                  | 234.4                                                                                                                     | 209.8                 | 258.9                 | 10.5                                 | 6.7     | 1.6     |
| 285.0                  | 216.9                                                                                                                     | 194.0                 | 239.8                 | 10.6                                 | 6.9     | 1.5     |
| 290.0                  | 201.0                                                                                                                     | 179.6                 | 222.4                 | 10.6                                 | 7.0     | 1.5     |
| 295.0                  | 186.4                                                                                                                     | 166.4                 | 206.4                 | 10.7                                 | 7.2     | 1.5     |
| 300.0                  | 173.2                                                                                                                     | 154.5                 | 191.9                 | 10.8                                 | 7.4     | 1.5     |

| <b>B57560G0234J000</b> |                                                                                                                           |                       |                       |                                      |            |            |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--------------------------------------|------------|------------|
| R/T No.                | 8405                                                                                                                      |                       |                       |                                      |            |            |
| T (°C)                 | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                       |                       |                                      |            |            |
|                        | R <sub>nomL</sub> [Ω]                                                                                                     | R <sub>minL</sub> [Ω] | R <sub>maxL</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0                  | 28088000                                                                                                                  | 24991000              | 31185000              | 11.0                                 | 1.4        | 7.8        |
| -50.0                  | 19160000                                                                                                                  | 17147000              | 21174000              | 10.5                                 | 1.4        | 7.5        |
| -45.0                  | 13253000                                                                                                                  | 11925000              | 14580000              | 10.0                                 | 1.4        | 7.2        |
| -40.0                  | 9286900                                                                                                                   | 8400000               | 10174000              | 9.6                                  | 1.4        | 7.0        |
| -35.0                  | 6588800                                                                                                                   | 5988900               | 7188600               | 9.1                                  | 1.3        | 6.7        |
| -30.0                  | 4729500                                                                                                                   | 4319100               | 5139900               | 8.7                                  | 1.3        | 6.5        |
| -25.0                  | 3432700                                                                                                                   | 3148900               | 3716600               | 8.3                                  | 1.3        | 6.3        |
| -20.0                  | 2517800                                                                                                                   | 2319500               | 2716200               | 7.9                                  | 1.3        | 6.1        |
| -15.0                  | 1865300                                                                                                                   | 1725300               | 2005300               | 7.5                                  | 1.3        | 5.9        |
| -10.0                  | 1395100                                                                                                                   | 1295400               | 1494800               | 7.1                                  | 1.2        | 5.7        |
| -5.0                   | 1052900                                                                                                                   | 981230                | 1124500               | 6.8                                  | 1.2        | 5.5        |
| 0.0                    | 801440                                                                                                                    | 749570                | 853320                | 6.5                                  | 1.2        | 5.4        |
| 5.0                    | 615090                                                                                                                    | 577230                | 652950                | 6.2                                  | 1.2        | 5.2        |
| 10.0                   | 475780                                                                                                                    | 447950                | 503620                | 5.8                                  | 1.2        | 5.1        |
| 15.0                   | 370790                                                                                                                    | 350190                | 391390                | 5.6                                  | 1.1        | 4.9        |
| 20.0                   | 291030                                                                                                                    | 275690                | 306380                | 5.3                                  | 1.1        | 4.8        |
| <b>25.0</b>            | <b>230000</b>                                                                                                             | <b>218500</b>         | <b>241500</b>         | <b>5.0</b>                           | <b>1.1</b> | <b>4.6</b> |
| 30.0                   | 182960                                                                                                                    | 173330                | 192590                | 5.3                                  | 1.2        | 4.5        |
| 35.0                   | 146460                                                                                                                    | 138370                | 154540                | 5.5                                  | 1.3        | 4.4        |
| 40.0                   | 117940                                                                                                                    | 111140                | 124750                | 5.8                                  | 1.4        | 4.3        |
| 45.0                   | 95528                                                                                                                     | 89788                 | 101270                | 6.0                                  | 1.4        | 4.2        |
| 50.0                   | 77804                                                                                                                     | 72946                 | 82661                 | 6.2                                  | 1.5        | 4.1        |
| 55.0                   | 63706                                                                                                                     | 59583                 | 67828                 | 6.5                                  | 1.6        | 3.9        |
| 60.0                   | 52429                                                                                                                     | 48921                 | 55938                 | 6.7                                  | 1.7        | 3.8        |
| 65.0                   | 43361                                                                                                                     | 40366                 | 46357                 | 6.9                                  | 1.8        | 3.7        |



|         | <b>B57560G0234J000</b>                                                                                                               |                           |                           |                         |                               |                 |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|-------------------------------|-----------------|
| R/T No. | 8405                                                                                                                                 |                           |                           |                         |                               |                 |
| T (°C)  | $B_{100/200} = 4537 \text{ K}$ , $R_{25} = 230000 \text{ } \Omega$ , $T_R = 25 \text{ } ^\circ\text{C}$ , $\Delta R_R/R_R = \pm 5\%$ |                           |                           |                         |                               |                 |
|         | $R_{\text{noml}}[\Omega]$                                                                                                            | $R_{\text{minl}}[\Omega]$ | $R_{\text{maxl}}[\Omega]$ | $\Delta R_R/R_R[\pm\%]$ | $\Delta T[\pm^\circ\text{C}]$ | $\alpha (\%/K)$ |
| 70.0    | 36032                                                                                                                                | 33468                     | 38596                     | 7.1                     | 1.9                           | 3.7             |
| 75.0    | 30078                                                                                                                                | 27876                     | 32280                     | 7.3                     | 2.1                           | 3.6             |
| 80.0    | 25218                                                                                                                                | 23322                     | 27114                     | 7.5                     | 2.2                           | 3.5             |
| 85.0    | 21233                                                                                                                                | 19596                     | 22871                     | 7.7                     | 2.3                           | 3.4             |
| 90.0    | 17951                                                                                                                                | 16533                     | 19369                     | 7.9                     | 2.4                           | 3.3             |
| 95.0    | 15236                                                                                                                                | 14005                     | 16468                     | 8.1                     | 2.5                           | 3.2             |
| 100.0   | 12981                                                                                                                                | 11909                     | 14053                     | 8.3                     | 2.6                           | 3.2             |
| 105.0   | 11100                                                                                                                                | 10164                     | 12037                     | 8.4                     | 2.7                           | 3.1             |
| 110.0   | 9526                                                                                                                                 | 8706                      | 10345                     | 8.6                     | 2.8                           | 3.0             |
| 115.0   | 8203                                                                                                                                 | 7483                      | 8922                      | 8.8                     | 3.0                           | 3.0             |
| 120.0   | 7087                                                                                                                                 | 6454                      | 7720                      | 8.9                     | 3.1                           | 2.9             |
| 125.0   | 6142                                                                                                                                 | 5584                      | 6700                      | 9.1                     | 3.2                           | 2.8             |
| 130.0   | 5340                                                                                                                                 | 4846                      | 5834                      | 9.2                     | 3.3                           | 2.8             |
| 135.0   | 4657                                                                                                                                 | 4219                      | 5094                      | 9.4                     | 3.5                           | 2.7             |
| 140.0   | 4073                                                                                                                                 | 3684                      | 4461                      | 9.5                     | 3.6                           | 2.7             |
| 145.0   | 3572                                                                                                                                 | 3226                      | 3918                      | 9.7                     | 3.7                           | 2.6             |
| 150.0   | 3141                                                                                                                                 | 2833                      | 3450                      | 9.8                     | 3.9                           | 2.5             |
| 155.0   | 2770                                                                                                                                 | 2494                      | 3046                      | 10.0                    | 4.0                           | 2.5             |
| 160.0   | 2449                                                                                                                                 | 2201                      | 2696                      | 10.1                    | 4.1                           | 2.4             |
| 165.0   | 2170                                                                                                                                 | 1948                      | 2392                      | 10.2                    | 4.3                           | 2.4             |
| 170.0   | 1928                                                                                                                                 | 1728                      | 2128                      | 10.4                    | 4.4                           | 2.3             |
| 175.0   | 1717                                                                                                                                 | 1537                      | 1897                      | 10.5                    | 4.6                           | 2.3             |
| 180.0   | 1532                                                                                                                                 | 1370                      | 1695                      | 10.6                    | 4.7                           | 2.3             |
| 185.0   | 1371                                                                                                                                 | 1224                      | 1518                      | 10.7                    | 4.9                           | 2.2             |
| 190.0   | 1229                                                                                                                                 | 1096                      | 1362                      | 10.8                    | 5.0                           | 2.2             |
| 195.0   | 1104                                                                                                                                 | 982.9                     | 1225                      | 11.0                    | 5.2                           | 2.1             |
| 200.0   | 993.8                                                                                                                                | 883.7                     | 1104                      | 11.1                    | 5.3                           | 2.1             |
| 205.0   | 896.4                                                                                                                                | 796.0                     | 996.7                     | 11.2                    | 5.5                           | 2.0             |
| 210.0   | 810.0                                                                                                                                | 718.5                     | 901.6                     | 11.3                    | 5.6                           | 2.0             |
| 215.0   | 733.4                                                                                                                                | 649.8                     | 817.1                     | 11.4                    | 5.8                           | 2.0             |
| 220.0   | 665.3                                                                                                                                | 588.7                     | 741.9                     | 11.5                    | 6.0                           | 1.9             |
| 225.0   | 604.5                                                                                                                                | 534.3                     | 674.7                     | 11.6                    | 6.1                           | 1.9             |
| 230.0   | 550.3                                                                                                                                | 485.8                     | 614.8                     | 11.7                    | 6.3                           | 1.9             |
| 235.0   | 501.8                                                                                                                                | 442.5                     | 561.0                     | 11.8                    | 6.5                           | 1.8             |
| 240.0   | 458.3                                                                                                                                | 403.7                     | 512.9                     | 11.9                    | 6.6                           | 1.8             |
| 245.0   | 419.2                                                                                                                                | 368.9                     | 469.6                     | 12.0                    | 6.8                           | 1.8             |
| 250.0   | 384.1                                                                                                                                | 337.6                     | 430.6                     | 12.1                    | 7.0                           | 1.7             |
| 255.0   | 352.5                                                                                                                                | 309.5                     | 395.4                     | 12.2                    | 7.2                           | 1.7             |
| 260.0   | 323.9                                                                                                                                | 284.1                     | 363.7                     | 12.3                    | 7.3                           | 1.7             |
| 265.0   | 298.1                                                                                                                                | 261.2                     | 335.0                     | 12.4                    | 7.5                           | 1.6             |

| B57560G0234J000 |                                                                                                                           |                       |                       |                                      |         |         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--------------------------------------|---------|---------|
| R/T No.         | 8405                                                                                                                      |                       |                       |                                      |         |         |
| T (°C)          | B <sub>100/200</sub> = 4537 K, R <sub>25</sub> = 230000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                       |                       |                                      |         |         |
|                 | R <sub>nomL</sub> [Ω]                                                                                                     | R <sub>minL</sub> [Ω] | R <sub>maxL</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 270.0           | 274.8                                                                                                                     | 240.5                 | 309.0                 | 12.5                                 | 7.7     | 1.6     |
| 275.0           | 253.6                                                                                                                     | 221.8                 | 285.4                 | 12.5                                 | 7.9     | 1.6     |
| 280.0           | 234.4                                                                                                                     | 204.8                 | 264.0                 | 12.6                                 | 8.1     | 1.6     |
| 285.0           | 216.9                                                                                                                     | 189.3                 | 244.4                 | 12.7                                 | 8.3     | 1.5     |
| 290.0           | 201.0                                                                                                                     | 175.2                 | 226.7                 | 12.8                                 | 8.5     | 1.5     |
| 295.0           | 186.4                                                                                                                     | 162.4                 | 210.4                 | 12.9                                 | 8.7     | 1.5     |
| 300.0           | 173.2                                                                                                                     | 150.8                 | 195.6                 | 13.0                                 | 8.8     | 1.5     |

| B57560G0145F000 |                                                                                                                            |                       |                       |                                      |            |            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--------------------------------------|------------|------------|
| R/T No.         | 8406                                                                                                                       |                       |                       |                                      |            |            |
| T (°C)          | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                       |                       |                                      |            |            |
|                 | R <sub>nomL</sub> [Ω]                                                                                                      | R <sub>minL</sub> [Ω] | R <sub>maxL</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0           | 256620000                                                                                                                  | 219170000             | 294060000             | 14.6                                 | 1.7        | 8.5        |
| -50.0           | 168960000                                                                                                                  | 146340000             | 191590000             | 13.4                                 | 1.6        | 8.2        |
| -45.0           | 113010000                                                                                                                  | 99161000              | 126860000             | 12.3                                 | 1.6        | 7.9        |
| -40.0           | 76708000                                                                                                                   | 68136000              | 85281000              | 11.2                                 | 1.5        | 7.6        |
| -35.0           | 52798000                                                                                                                   | 47437000              | 58158000              | 10.2                                 | 1.4        | 7.3        |
| -30.0           | 36821000                                                                                                                   | 33441000              | 40202000              | 9.2                                  | 1.3        | 7.1        |
| -25.0           | 26000000                                                                                                                   | 23854000              | 28147000              | 8.3                                  | 1.2        | 6.8        |
| -20.0           | 18576000                                                                                                                   | 17206000              | 19946000              | 7.4                                  | 1.1        | 6.6        |
| -15.0           | 13421000                                                                                                                   | 12544000              | 14298000              | 6.5                                  | 1.0        | 6.4        |
| -10.0           | 9799500                                                                                                                    | 9237700               | 10361000              | 5.7                                  | 0.9        | 6.2        |
| -5.0            | 7227500                                                                                                                    | 6868500               | 7586400               | 5.0                                  | 0.8        | 6.0        |
| 0.0             | 5381600                                                                                                                    | 5153800               | 5609400               | 4.2                                  | 0.7        | 5.8        |
| 5.0             | 4043700                                                                                                                    | 3900900               | 4186500               | 3.5                                  | 0.6        | 5.6        |
| 10.0            | 3064800                                                                                                                    | 2977200               | 3152500               | 2.9                                  | 0.5        | 5.5        |
| 15.0            | 2342200                                                                                                                    | 2290300               | 2394000               | 2.2                                  | 0.4        | 5.3        |
| 20.0            | 1804000                                                                                                                    | 1775200               | 1832800               | 1.6                                  | 0.3        | 5.1        |
| <b>25.0</b>     | <b>1400000</b>                                                                                                             | <b>1386000</b>        | <b>1414000</b>        | <b>1.0</b>                           | <b>0.2</b> | <b>5.0</b> |
| 30.0            | 1094300                                                                                                                    | 1077100               | 1111500               | 1.6                                  | 0.3        | 4.9        |
| 35.0            | 861230                                                                                                                     | 842850                | 879620                | 2.1                                  | 0.5        | 4.7        |
| 40.0            | 682280                                                                                                                     | 663990                | 700560                | 2.7                                  | 0.6        | 4.6        |
| 45.0            | 543920                                                                                                                     | 526460                | 561380                | 3.2                                  | 0.7        | 4.5        |
| 50.0            | 436240                                                                                                                     | 419980                | 452500                | 3.7                                  | 0.9        | 4.4        |
| 55.0            | 351910                                                                                                                     | 337030                | 366800                | 4.2                                  | 1.0        | 4.2        |
| 60.0            | 285460                                                                                                                     | 271990                | 298940                | 4.7                                  | 1.1        | 4.1        |
| 65.0            | 232800                                                                                                                     | 220700                | 244900                | 5.2                                  | 1.3        | 4.0        |
| 70.0            | 190830                                                                                                                     | 180020                | 201640                | 5.7                                  | 1.4        | 3.9        |
| 75.0            | 157190                                                                                                                     | 147570                | 166810                | 6.1                                  | 1.6        | 3.8        |

|         | <b>B57560G0145F000</b>                                                                                                     |                      |                      |                                      |         |         |
|---------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8406                                                                                                                       |                      |                      |                                      |         |         |
| T (°C)  | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |         |         |
|         | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 80.0    | 130100                                                                                                                     | 121560               | 138640               | 6.6                                  | 1.8     | 3.7     |
| 85.0    | 108180                                                                                                                     | 100610               | 115750               | 7.0                                  | 1.9     | 3.6     |
| 90.0    | 90338                                                                                                                      | 83635                | 97042                | 7.4                                  | 2.1     | 3.6     |
| 95.0    | 75763                                                                                                                      | 69828                | 81698                | 7.8                                  | 2.3     | 3.5     |
| 100.0   | 63799                                                                                                                      | 58544                | 69054                | 8.2                                  | 2.4     | 3.4     |
| 105.0   | 53936                                                                                                                      | 49280                | 58592                | 8.6                                  | 2.6     | 3.3     |
| 110.0   | 45772                                                                                                                      | 41644                | 49899                | 9.0                                  | 2.8     | 3.2     |
| 115.0   | 38986                                                                                                                      | 35323                | 42648                | 9.4                                  | 3.0     | 3.2     |
| 120.0   | 33324                                                                                                                      | 30071                | 36577                | 9.8                                  | 3.1     | 3.1     |
| 125.0   | 28582                                                                                                                      | 25689                | 31476                | 10.1                                 | 3.3     | 3.0     |
| 130.0   | 24596                                                                                                                      | 22020                | 27173                | 10.5                                 | 3.5     | 3.0     |
| 135.0   | 21234                                                                                                                      | 18937                | 23532                | 10.8                                 | 3.7     | 2.9     |
| 140.0   | 18389                                                                                                                      | 16337                | 20441                | 11.2                                 | 3.9     | 2.8     |
| 145.0   | 15972                                                                                                                      | 14137                | 17808                | 11.5                                 | 4.1     | 2.8     |
| 150.0   | 13914                                                                                                                      | 12270                | 15558                | 11.8                                 | 4.3     | 2.7     |
| 155.0   | 12155                                                                                                                      | 10680                | 13629                | 12.1                                 | 4.5     | 2.7     |
| 160.0   | 10647                                                                                                                      | 9323                 | 11972                | 12.4                                 | 4.7     | 2.6     |
| 165.0   | 9351                                                                                                                       | 8159                 | 10543                | 12.7                                 | 5.0     | 2.6     |
| 170.0   | 8234                                                                                                                       | 7160                 | 9308                 | 13.0                                 | 5.2     | 2.5     |
| 175.0   | 7269                                                                                                                       | 6299                 | 8238                 | 13.3                                 | 5.4     | 2.5     |
| 180.0   | 6432                                                                                                                       | 5556                 | 7308                 | 13.6                                 | 5.6     | 2.4     |
| 185.0   | 5705                                                                                                                       | 4912                 | 6498                 | 13.9                                 | 5.9     | 2.4     |
| 190.0   | 5071                                                                                                                       | 4352                 | 5791                 | 14.2                                 | 6.1     | 2.3     |
| 195.0   | 4518                                                                                                                       | 3865                 | 5171                 | 14.5                                 | 6.3     | 2.3     |
| 200.0   | 4034                                                                                                                       | 3441                 | 4628                 | 14.7                                 | 6.6     | 2.2     |
| 205.0   | 3610                                                                                                                       | 3069                 | 4150                 | 15.0                                 | 6.8     | 2.2     |
| 210.0   | 3236                                                                                                                       | 2743                 | 3729                 | 15.2                                 | 7.0     | 2.2     |
| 215.0   | 2907                                                                                                                       | 2457                 | 3357                 | 15.5                                 | 7.3     | 2.1     |
| 220.0   | 2617                                                                                                                       | 2205                 | 3028                 | 15.7                                 | 7.5     | 2.1     |
| 225.0   | 2360                                                                                                                       | 1983                 | 2736                 | 16.0                                 | 7.8     | 2.0     |
| 230.0   | 2132                                                                                                                       | 1786                 | 2477                 | 16.2                                 | 8.0     | 2.0     |
| 235.0   | 1929                                                                                                                       | 1612                 | 2246                 | 16.4                                 | 8.3     | 2.0     |
| 240.0   | 1749                                                                                                                       | 1457                 | 2041                 | 16.7                                 | 8.6     | 1.9     |
| 245.0   | 1588                                                                                                                       | 1320                 | 1857                 | 16.9                                 | 8.8     | 1.9     |
| 250.0   | 1445                                                                                                                       | 1197                 | 1692                 | 17.1                                 | 9.1     | 1.9     |
| 255.0   | 1316                                                                                                                       | 1088                 | 1544                 | 17.3                                 | 9.4     | 1.8     |
| 260.0   | 1201                                                                                                                       | 990.1                | 1412                 | 17.6                                 | 9.7     | 1.8     |
| 265.0   | 1097                                                                                                                       | 902.5                | 1292                 | 17.8                                 | 9.9     | 1.8     |
| 270.0   | 1004                                                                                                                       | 823.9                | 1185                 | 18.0                                 | 10.2    | 1.8     |
| 275.0   | 920.6                                                                                                                      | 753.3                | 1088                 | 18.2                                 | 10.5    | 1.7     |

|         | <b>B57560G0145F000</b>                                                                                                     |                      |                      |                                      |         |         |
|---------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8406                                                                                                                       |                      |                      |                                      |         |         |
| T (°C)  | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 1% |                      |                      |                                      |         |         |
|         | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 280.0   | 844.9                                                                                                                      | 689.7                | 1000                 | 18.4                                 | 10.8    | 1.7     |
| 285.0   | 776.6                                                                                                                      | 632.4                | 920.8                | 18.6                                 | 11.1    | 1.7     |
| 290.0   | 714.7                                                                                                                      | 580.6                | 848.8                | 18.8                                 | 11.4    | 1.6     |
| 295.0   | 658.7                                                                                                                      | 533.8                | 783.5                | 19.0                                 | 11.7    | 1.6     |
| 300.0   | 607.8                                                                                                                      | 491.4                | 724.1                | 19.1                                 | 12.0    | 1.6     |

|             | <b>B57560G0145G000</b>                                                                                                     |                      |                      |                                      |            |            |
|-------------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.     | 8406                                                                                                                       |                      |                      |                                      |            |            |
| T (°C)      | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |            |            |
|             | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0       | 256620000                                                                                                                  | 216250000            | 296980000            | 15.7                                 | 1.8        | 8.5        |
| -50.0       | 168960000                                                                                                                  | 144440000            | 193490000            | 14.5                                 | 1.8        | 8.2        |
| -45.0       | 113010000                                                                                                                  | 97905000             | 128110000            | 13.4                                 | 1.7        | 7.9        |
| -40.0       | 76708000                                                                                                                   | 67291000             | 86126000             | 12.3                                 | 1.6        | 7.6        |
| -35.0       | 52798000                                                                                                                   | 46861000             | 58734000             | 11.2                                 | 1.5        | 7.3        |
| -30.0       | 36821000                                                                                                                   | 33043000             | 40600000             | 10.3                                 | 1.4        | 7.1        |
| -25.0       | 26000000                                                                                                                   | 23575000             | 28425000             | 9.3                                  | 1.4        | 6.8        |
| -20.0       | 18576000                                                                                                                   | 17009000             | 20144000             | 8.4                                  | 1.3        | 6.6        |
| -15.0       | 13421000                                                                                                                   | 12402000             | 14440000             | 7.6                                  | 1.2        | 6.4        |
| -10.0       | 9799500                                                                                                                    | 9135100              | 10464000             | 6.8                                  | 1.1        | 6.2        |
| -5.0        | 7227500                                                                                                                    | 6793400              | 7661500              | 6.0                                  | 1.0        | 6.0        |
| 0.0         | 5381600                                                                                                                    | 5098200              | 5665000              | 5.3                                  | 0.9        | 5.8        |
| 5.0         | 4043700                                                                                                                    | 3859500              | 4228000              | 4.6                                  | 0.8        | 5.6        |
| 10.0        | 3064800                                                                                                                    | 2946000              | 3183700              | 3.9                                  | 0.7        | 5.5        |
| 15.0        | 2342200                                                                                                                    | 2266600              | 2417700              | 3.2                                  | 0.6        | 5.3        |
| 20.0        | 1804000                                                                                                                    | 1757100              | 1850900              | 2.6                                  | 0.5        | 5.1        |
| <b>25.0</b> | <b>1400000</b>                                                                                                             | <b>1372000</b>       | <b>1428000</b>       | <b>2.0</b>                           | <b>0.4</b> | <b>5.0</b> |
| 30.0        | 1094300                                                                                                                    | 1066000              | 1122500              | 2.6                                  | 0.5        | 4.9        |
| 35.0        | 861230                                                                                                                     | 834140               | 888330               | 3.1                                  | 0.7        | 4.7        |
| 40.0        | 682280                                                                                                                     | 657060               | 707490               | 3.7                                  | 0.8        | 4.6        |
| 45.0        | 543920                                                                                                                     | 520900               | 566940               | 4.2                                  | 0.9        | 4.5        |
| 50.0        | 436240                                                                                                                     | 415500               | 456980               | 4.8                                  | 1.1        | 4.4        |
| 55.0        | 351910                                                                                                                     | 333390               | 370430               | 5.3                                  | 1.2        | 4.2        |
| 60.0        | 285460                                                                                                                     | 269030               | 301900               | 5.8                                  | 1.4        | 4.1        |
| 65.0        | 232800                                                                                                                     | 218270               | 247330               | 6.2                                  | 1.5        | 4.0        |
| 70.0        | 190830                                                                                                                     | 178020               | 203630               | 6.7                                  | 1.7        | 3.9        |
| 75.0        | 157190                                                                                                                     | 145920               | 168470               | 7.2                                  | 1.9        | 3.8        |
| 80.0        | 130100                                                                                                                     | 120190               | 140020               | 7.6                                  | 2.0        | 3.7        |
| 85.0        | 108180                                                                                                                     | 99460                | 116890               | 8.1                                  | 2.2        | 3.6        |

**Temperature measurement**
**B57560**
**Glass-encapsulated sensors**
**G560**

|         | <b>B57560G0145G000</b>                                                                                                     |                       |                       |                                      |         |         |
|---------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--------------------------------------|---------|---------|
| R/T No. | 8406                                                                                                                       |                       |                       |                                      |         |         |
| T (°C)  | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                       |                       |                                      |         |         |
|         | R <sub>noml</sub> [Ω]                                                                                                      | R <sub>minl</sub> [Ω] | R <sub>maxl</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 90.0    | 90338                                                                                                                      | 82674                 | 98003                 | 8.5                                  | 2.4     | 3.6     |
| 95.0    | 75763                                                                                                                      | 69019                 | 82507                 | 8.9                                  | 2.6     | 3.5     |
| 100.0   | 63799                                                                                                                      | 57860                 | 69738                 | 9.3                                  | 2.7     | 3.4     |
| 105.0   | 53936                                                                                                                      | 48700                 | 59172                 | 9.7                                  | 2.9     | 3.3     |
| 110.0   | 45772                                                                                                                      | 41150                 | 50393                 | 10.1                                 | 3.1     | 3.2     |
| 115.0   | 38986                                                                                                                      | 34901                 | 43071                 | 10.5                                 | 3.3     | 3.2     |
| 120.0   | 33324                                                                                                                      | 29709                 | 36940                 | 10.8                                 | 3.5     | 3.1     |
| 125.0   | 28582                                                                                                                      | 25377                 | 31787                 | 11.2                                 | 3.7     | 3.0     |
| 130.0   | 24596                                                                                                                      | 21751                 | 27442                 | 11.6                                 | 3.9     | 3.0     |
| 135.0   | 21234                                                                                                                      | 18704                 | 23765                 | 11.9                                 | 4.1     | 2.9     |
| 140.0   | 18389                                                                                                                      | 16134                 | 20643                 | 12.3                                 | 4.3     | 2.8     |
| 145.0   | 15972                                                                                                                      | 13961                 | 17984                 | 12.6                                 | 4.5     | 2.8     |
| 150.0   | 13914                                                                                                                      | 12116                 | 15712                 | 12.9                                 | 4.7     | 2.7     |
| 155.0   | 12155                                                                                                                      | 10545                 | 13764                 | 13.2                                 | 4.9     | 2.7     |
| 160.0   | 10647                                                                                                                      | 9204                  | 12091                 | 13.6                                 | 5.2     | 2.6     |
| 165.0   | 9351                                                                                                                       | 8055                  | 10648                 | 13.9                                 | 5.4     | 2.6     |
| 170.0   | 8234                                                                                                                       | 7068                  | 9401                  | 14.2                                 | 5.6     | 2.5     |
| 175.0   | 7269                                                                                                                       | 6218                  | 8320                  | 14.5                                 | 5.9     | 2.5     |
| 180.0   | 6432                                                                                                                       | 5483                  | 7381                  | 14.7                                 | 6.1     | 2.4     |
| 185.0   | 5705                                                                                                                       | 4847                  | 6562                  | 15.0                                 | 6.3     | 2.4     |
| 190.0   | 5071                                                                                                                       | 4295                  | 5848                  | 15.3                                 | 6.6     | 2.3     |
| 195.0   | 4518                                                                                                                       | 3814                  | 5223                  | 15.6                                 | 6.8     | 2.3     |
| 200.0   | 4034                                                                                                                       | 3395                  | 4674                  | 15.9                                 | 7.1     | 2.2     |
| 205.0   | 3610                                                                                                                       | 3028                  | 4191                  | 16.1                                 | 7.3     | 2.2     |
| 210.0   | 3236                                                                                                                       | 2706                  | 3766                  | 16.4                                 | 7.6     | 2.2     |
| 215.0   | 2907                                                                                                                       | 2424                  | 3391                  | 16.6                                 | 7.8     | 2.1     |
| 220.0   | 2617                                                                                                                       | 2175                  | 3058                  | 16.9                                 | 8.1     | 2.1     |
| 225.0   | 2360                                                                                                                       | 1956                  | 2764                  | 17.1                                 | 8.4     | 2.0     |
| 230.0   | 2132                                                                                                                       | 1762                  | 2502                  | 17.4                                 | 8.6     | 2.0     |
| 235.0   | 1929                                                                                                                       | 1590                  | 2269                  | 17.6                                 | 8.9     | 2.0     |
| 240.0   | 1749                                                                                                                       | 1437                  | 2061                  | 17.8                                 | 9.2     | 1.9     |
| 245.0   | 1588                                                                                                                       | 1301                  | 1875                  | 18.1                                 | 9.4     | 1.9     |
| 250.0   | 1445                                                                                                                       | 1180                  | 1709                  | 18.3                                 | 9.7     | 1.9     |
| 255.0   | 1316                                                                                                                       | 1073                  | 1560                  | 18.5                                 | 10.0    | 1.8     |
| 260.0   | 1201                                                                                                                       | 976.1                 | 1426                  | 18.7                                 | 10.3    | 1.8     |
| 265.0   | 1097                                                                                                                       | 889.7                 | 1305                  | 18.9                                 | 10.6    | 1.8     |
| 270.0   | 1004                                                                                                                       | 812.2                 | 1197                  | 19.1                                 | 10.9    | 1.8     |
| 275.0   | 920.6                                                                                                                      | 742.5                 | 1099                  | 19.3                                 | 11.2    | 1.7     |
| 280.0   | 844.9                                                                                                                      | 679.8                 | 1010                  | 19.5                                 | 11.5    | 1.7     |
| 285.0   | 776.6                                                                                                                      | 623.2                 | 929.9                 | 19.7                                 | 11.8    | 1.7     |

| B57560G0145G000 |                                                                                                                            |                      |                      |                                      |         |         |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No.         | 8406                                                                                                                       |                      |                      |                                      |         |         |
| T (°C)          | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 2% |                      |                      |                                      |         |         |
|                 | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 290.0           | 714.7                                                                                                                      | 572.2                | 857.2                | 19.9                                 | 12.1    | 1.6     |
| 295.0           | 658.7                                                                                                                      | 526.0                | 791.3                | 20.1                                 | 12.4    | 1.6     |
| 300.0           | 607.8                                                                                                                      | 484.3                | 731.3                | 20.3                                 | 12.7    | 1.6     |

| B57560G0145H000 |                                                                                                                            |                      |                      |                                      |            |            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.         | 8406                                                                                                                       |                      |                      |                                      |            |            |
| T (°C)          | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|                 | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0           | 256620000                                                                                                                  | 213340000            | 299890000            | 16.9                                 | 2.0        | 8.5        |
| -50.0           | 168960000                                                                                                                  | 142540000            | 195390000            | 15.6                                 | 1.9        | 8.2        |
| -45.0           | 113010000                                                                                                                  | 96649000             | 129370000            | 14.5                                 | 1.8        | 7.9        |
| -40.0           | 76708000                                                                                                                   | 66447000             | 86970000             | 13.4                                 | 1.8        | 7.6        |
| -35.0           | 52798000                                                                                                                   | 46286000             | 59310000             | 12.3                                 | 1.7        | 7.3        |
| -30.0           | 36821000                                                                                                                   | 32645000             | 40998000             | 11.3                                 | 1.6        | 7.1        |
| -25.0           | 26000000                                                                                                                   | 23296000             | 28704000             | 10.4                                 | 1.5        | 6.8        |
| -20.0           | 18576000                                                                                                                   | 16811000             | 20341000             | 9.5                                  | 1.4        | 6.6        |
| -15.0           | 13421000                                                                                                                   | 12261000             | 14581000             | 8.6                                  | 1.4        | 6.4        |
| -10.0           | 9799500                                                                                                                    | 9032600              | 10567000             | 7.8                                  | 1.3        | 6.2        |
| -5.0            | 7227500                                                                                                                    | 6718300              | 7736600              | 7.0                                  | 1.2        | 6.0        |
| 0.0             | 5381600                                                                                                                    | 5042700              | 5720500              | 6.3                                  | 1.1        | 5.8        |
| 5.0             | 4043700                                                                                                                    | 3818000              | 4269400              | 5.6                                  | 1.0        | 5.6        |
| 10.0            | 3064800                                                                                                                    | 2914800              | 3214900              | 4.9                                  | 0.9        | 5.5        |
| 15.0            | 2342200                                                                                                                    | 2242900              | 2441400              | 4.2                                  | 0.8        | 5.3        |
| 20.0            | 1804000                                                                                                                    | 1739000              | 1869100              | 3.6                                  | 0.7        | 5.1        |
| <b>25.0</b>     | <b>1400000</b>                                                                                                             | <b>1358000</b>       | <b>1442000</b>       | <b>3.0</b>                           | <b>0.6</b> | <b>5.0</b> |
| 30.0            | 1094300                                                                                                                    | 1055000              | 1133500              | 3.6                                  | 0.7        | 4.9        |
| 35.0            | 861230                                                                                                                     | 825430               | 897040               | 4.2                                  | 0.9        | 4.7        |
| 40.0            | 682280                                                                                                                     | 650120               | 714430               | 4.7                                  | 1.0        | 4.6        |
| 45.0            | 543920                                                                                                                     | 515340               | 572490               | 5.3                                  | 1.2        | 4.5        |
| 50.0            | 436240                                                                                                                     | 411020               | 461460               | 5.8                                  | 1.3        | 4.4        |
| 55.0            | 351910                                                                                                                     | 329760               | 374060               | 6.3                                  | 1.5        | 4.2        |
| 60.0            | 285460                                                                                                                     | 266070               | 304860               | 6.8                                  | 1.6        | 4.1        |
| 65.0            | 232800                                                                                                                     | 215850               | 249750               | 7.3                                  | 1.8        | 4.0        |
| 70.0            | 190830                                                                                                                     | 176020               | 205630               | 7.8                                  | 2.0        | 3.9        |
| 75.0            | 157190                                                                                                                     | 144270               | 170120               | 8.2                                  | 2.1        | 3.8        |
| 80.0            | 130100                                                                                                                     | 118820               | 141390               | 8.7                                  | 2.3        | 3.7        |
| 85.0            | 108180                                                                                                                     | 98314                | 118040               | 9.1                                  | 2.5        | 3.6        |
| 90.0            | 90338                                                                                                                      | 81713                | 98964                | 9.5                                  | 2.7        | 3.6        |
| 95.0            | 75763                                                                                                                      | 68210                | 83316                | 10.0                                 | 2.9        | 3.5        |

|         | <b>B57560G0145H000</b>                                                                                                     |                      |                      |                                      |         |         |
|---------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8406                                                                                                                       |                      |                      |                                      |         |         |
| T (°C)  | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |         |         |
|         | R <sub>noml</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 100.0   | 63799                                                                                                                      | 57176                | 70422                | 10.4                                 | 3.1     | 3.4     |
| 105.0   | 53936                                                                                                                      | 48120                | 59752                | 10.8                                 | 3.2     | 3.3     |
| 110.0   | 45772                                                                                                                      | 40656                | 50887                | 11.2                                 | 3.4     | 3.2     |
| 115.0   | 38986                                                                                                                      | 34479                | 43493                | 11.6                                 | 3.6     | 3.2     |
| 120.0   | 33324                                                                                                                      | 29346                | 37302                | 11.9                                 | 3.8     | 3.1     |
| 125.0   | 28582                                                                                                                      | 25065                | 32099                | 12.3                                 | 4.1     | 3.0     |
| 130.0   | 24596                                                                                                                      | 21482                | 27711                | 12.7                                 | 4.3     | 3.0     |
| 135.0   | 21234                                                                                                                      | 18471                | 23998                | 13.0                                 | 4.5     | 2.9     |
| 140.0   | 18389                                                                                                                      | 15932                | 20846                | 13.4                                 | 4.7     | 2.8     |
| 145.0   | 15972                                                                                                                      | 13785                | 18160                | 13.7                                 | 4.9     | 2.8     |
| 150.0   | 13914                                                                                                                      | 11962                | 15866                | 14.0                                 | 5.1     | 2.7     |
| 155.0   | 12155                                                                                                                      | 10411                | 13899                | 14.4                                 | 5.4     | 2.7     |
| 160.0   | 10647                                                                                                                      | 9086                 | 12209                | 14.7                                 | 5.6     | 2.6     |
| 165.0   | 9351                                                                                                                       | 7951                 | 10752                | 15.0                                 | 5.8     | 2.6     |
| 170.0   | 8234                                                                                                                       | 6976                 | 9493                 | 15.3                                 | 6.1     | 2.5     |
| 175.0   | 7269                                                                                                                       | 6136                 | 8401                 | 15.6                                 | 6.3     | 2.5     |
| 180.0   | 6432                                                                                                                       | 5411                 | 7453                 | 15.9                                 | 6.6     | 2.4     |
| 185.0   | 5705                                                                                                                       | 4783                 | 6627                 | 16.2                                 | 6.8     | 2.4     |
| 190.0   | 5071                                                                                                                       | 4238                 | 5905                 | 16.4                                 | 7.1     | 2.3     |
| 195.0   | 4518                                                                                                                       | 3763                 | 5274                 | 16.7                                 | 7.3     | 2.3     |
| 200.0   | 4034                                                                                                                       | 3349                 | 4720                 | 17.0                                 | 7.6     | 2.2     |
| 205.0   | 3610                                                                                                                       | 2987                 | 4232                 | 17.3                                 | 7.8     | 2.2     |
| 210.0   | 3236                                                                                                                       | 2669                 | 3803                 | 17.5                                 | 8.1     | 2.2     |
| 215.0   | 2907                                                                                                                       | 2391                 | 3424                 | 17.8                                 | 8.4     | 2.1     |
| 220.0   | 2617                                                                                                                       | 2145                 | 3088                 | 18.0                                 | 8.6     | 2.1     |
| 225.0   | 2360                                                                                                                       | 1928                 | 2791                 | 18.3                                 | 8.9     | 2.0     |
| 230.0   | 2132                                                                                                                       | 1737                 | 2526                 | 18.5                                 | 9.2     | 2.0     |
| 235.0   | 1929                                                                                                                       | 1567                 | 2291                 | 18.8                                 | 9.5     | 2.0     |
| 240.0   | 1749                                                                                                                       | 1417                 | 2081                 | 19.0                                 | 9.8     | 1.9     |
| 245.0   | 1588                                                                                                                       | 1283                 | 1893                 | 19.2                                 | 10.1    | 1.9     |
| 250.0   | 1445                                                                                                                       | 1164                 | 1725                 | 19.4                                 | 10.3    | 1.9     |
| 255.0   | 1316                                                                                                                       | 1057                 | 1575                 | 19.7                                 | 10.6    | 1.8     |
| 260.0   | 1201                                                                                                                       | 962.1                | 1440                 | 19.9                                 | 10.9    | 1.8     |
| 265.0   | 1097                                                                                                                       | 876.9                | 1318                 | 20.1                                 | 11.2    | 1.8     |
| 270.0   | 1004                                                                                                                       | 800.4                | 1208                 | 20.3                                 | 11.6    | 1.8     |
| 275.0   | 920.6                                                                                                                      | 731.7                | 1109                 | 20.5                                 | 11.9    | 1.7     |
| 280.0   | 844.9                                                                                                                      | 669.9                | 1020                 | 20.7                                 | 12.2    | 1.7     |
| 285.0   | 776.6                                                                                                                      | 614.1                | 939.0                | 20.9                                 | 12.5    | 1.7     |
| 290.0   | 714.7                                                                                                                      | 563.8                | 865.6                | 21.1                                 | 12.8    | 1.6     |
| 295.0   | 658.7                                                                                                                      | 518.3                | 799.0                | 21.3                                 | 13.1    | 1.6     |

# Temperature measurement

B57560

## Glass-encapsulated sensors

G560

| B57560G0145H000 |                                                                                                                            |                      |                      |                                      |            |            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|------------|------------|
| R/T No.         | 8406                                                                                                                       |                      |                      |                                      |            |            |
| T (°C)          | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 3% |                      |                      |                                      |            |            |
|                 | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| 300.0           | 607.8                                                                                                                      | 477.1                | 738.5                | 21.5                                 | 13.4       | 1.6        |
| B57560G0145J000 |                                                                                                                            |                      |                      |                                      |            |            |
| R/T No.         | 8406                                                                                                                       |                      |                      |                                      |            |            |
| T (°C)          | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |            |            |
|                 | R <sub>nom</sub> [Ω]                                                                                                       | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C]    | α (%/K)    |
| -55.0           | 256620000                                                                                                                  | 207520000            | 305710000            | 19.1                                 | 2.2        | 8.5        |
| -50.0           | 168960000                                                                                                                  | 138750000            | 199180000            | 17.9                                 | 2.2        | 8.2        |
| -45.0           | 113010000                                                                                                                  | 94137000             | 131880000            | 16.7                                 | 2.1        | 7.9        |
| -40.0           | 76708000                                                                                                                   | 64758000             | 88659000             | 15.6                                 | 2.0        | 7.6        |
| -35.0           | 52798000                                                                                                                   | 45134000             | 60462000             | 14.5                                 | 2.0        | 7.3        |
| -30.0           | 36821000                                                                                                                   | 31848000             | 41794000             | 13.5                                 | 1.9        | 7.1        |
| -25.0           | 26000000                                                                                                                   | 22739000             | 29261000             | 12.5                                 | 1.8        | 6.8        |
| -20.0           | 18576000                                                                                                                   | 16416000             | 20736000             | 11.6                                 | 1.8        | 6.6        |
| -15.0           | 13421000                                                                                                                   | 11978000             | 14864000             | 10.8                                 | 1.7        | 6.4        |
| -10.0           | 9799500                                                                                                                    | 8827400              | 10772000             | 9.9                                  | 1.6        | 6.2        |
| -5.0            | 7227500                                                                                                                    | 6568000              | 7886900              | 9.1                                  | 1.5        | 6.0        |
| 0.0             | 5381600                                                                                                                    | 4931600              | 5831600              | 8.4                                  | 1.4        | 5.8        |
| 5.0             | 4043700                                                                                                                    | 3735100              | 4352300              | 7.6                                  | 1.4        | 5.6        |
| 10.0            | 3064800                                                                                                                    | 2852400              | 3277300              | 6.9                                  | 1.3        | 5.5        |
| 15.0            | 2342200                                                                                                                    | 2195500              | 2488800              | 6.3                                  | 1.2        | 5.3        |
| 20.0            | 1804000                                                                                                                    | 1702700              | 1905400              | 5.6                                  | 1.1        | 5.1        |
| <b>25.0</b>     | <b>1400000</b>                                                                                                             | <b>1330000</b>       | <b>1470000</b>       | <b>5.0</b>                           | <b>1.0</b> | <b>5.0</b> |
| 30.0            | 1094300                                                                                                                    | 1033000              | 1155600              | 5.6                                  | 1.2        | 4.9        |
| 35.0            | 861230                                                                                                                     | 808010               | 914450               | 6.2                                  | 1.3        | 4.7        |
| 40.0            | 682280                                                                                                                     | 636250               | 728300               | 6.7                                  | 1.5        | 4.6        |
| 45.0            | 543920                                                                                                                     | 504230               | 583610               | 7.3                                  | 1.6        | 4.5        |
| 50.0            | 436240                                                                                                                     | 402060               | 470420               | 7.8                                  | 1.8        | 4.4        |
| 55.0            | 351910                                                                                                                     | 322500               | 381320               | 8.4                                  | 2.0        | 4.2        |
| 60.0            | 285460                                                                                                                     | 260150               | 310780               | 8.9                                  | 2.1        | 4.1        |
| 65.0            | 232800                                                                                                                     | 211000               | 254600               | 9.4                                  | 2.3        | 4.0        |
| 70.0            | 190830                                                                                                                     | 172030               | 209620               | 9.8                                  | 2.5        | 3.9        |
| 75.0            | 157190                                                                                                                     | 140970               | 173420               | 10.3                                 | 2.7        | 3.8        |
| 80.0            | 130100                                                                                                                     | 116070               | 144140               | 10.8                                 | 2.9        | 3.7        |
| 85.0            | 108180                                                                                                                     | 96022                | 120330               | 11.2                                 | 3.1        | 3.6        |
| 90.0            | 90338                                                                                                                      | 79792                | 100890               | 11.7                                 | 3.3        | 3.6        |
| 95.0            | 75763                                                                                                                      | 66592                | 84933                | 12.1                                 | 3.5        | 3.5        |
| 100.0           | 63799                                                                                                                      | 55809                | 71789                | 12.5                                 | 3.7        | 3.4        |
| 105.0           | 53936                                                                                                                      | 46960                | 60912                | 12.9                                 | 3.9        | 3.3        |



|         | <b>B57560G0145J000</b>                                                                                                     |                      |                      |                                      |         |         |
|---------|----------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|--------------------------------------|---------|---------|
| R/T No. | 8406                                                                                                                       |                      |                      |                                      |         |         |
| T (°C)  | B <sub>200/300</sub> = 5133 K, R <sub>25</sub> = 1400000 Ω, T <sub>R</sub> = 25 °C, ΔR <sub>R</sub> /R <sub>R</sub> = ± 5% |                      |                      |                                      |         |         |
|         | R <sub>noml</sub> [Ω]                                                                                                      | R <sub>min</sub> [Ω] | R <sub>max</sub> [Ω] | ΔR <sub>R</sub> /R <sub>R</sub> [±%] | ΔT[±°C] | α (%/K) |
| 110.0   | 45772                                                                                                                      | 39668                | 51875                | 13.3                                 | 4.1     | 3.2     |
| 115.0   | 38986                                                                                                                      | 33634                | 44337                | 13.7                                 | 4.3     | 3.2     |
| 120.0   | 33324                                                                                                                      | 28622                | 38026                | 14.1                                 | 4.5     | 3.1     |
| 125.0   | 28582                                                                                                                      | 24442                | 32722                | 14.5                                 | 4.8     | 3.0     |
| 130.0   | 24596                                                                                                                      | 20944                | 28249                | 14.9                                 | 5.0     | 3.0     |
| 135.0   | 21234                                                                                                                      | 18005                | 24464                | 15.2                                 | 5.2     | 2.9     |
| 140.0   | 18389                                                                                                                      | 15527                | 21250                | 15.6                                 | 5.5     | 2.8     |
| 145.0   | 15972                                                                                                                      | 13432                | 18513                | 15.9                                 | 5.7     | 2.8     |
| 150.0   | 13914                                                                                                                      | 11654                | 16174                | 16.2                                 | 5.9     | 2.7     |
| 155.0   | 12155                                                                                                                      | 10141                | 14169                | 16.6                                 | 6.2     | 2.7     |
| 160.0   | 10647                                                                                                                      | 8848                 | 12446                | 16.9                                 | 6.4     | 2.6     |
| 165.0   | 9351                                                                                                                       | 7742                 | 10961                | 17.2                                 | 6.7     | 2.6     |
| 170.0   | 8234                                                                                                                       | 6792                 | 9677                 | 17.5                                 | 7.0     | 2.5     |
| 175.0   | 7269                                                                                                                       | 5973                 | 8564                 | 17.8                                 | 7.2     | 2.5     |
| 180.0   | 6432                                                                                                                       | 5266                 | 7598                 | 18.1                                 | 7.5     | 2.4     |
| 185.0   | 5705                                                                                                                       | 4654                 | 6755                 | 18.4                                 | 7.8     | 2.4     |
| 190.0   | 5071                                                                                                                       | 4123                 | 6020                 | 18.7                                 | 8.0     | 2.3     |
| 195.0   | 4518                                                                                                                       | 3661                 | 5376                 | 19.0                                 | 8.3     | 2.3     |
| 200.0   | 4034                                                                                                                       | 3257                 | 4811                 | 19.3                                 | 8.6     | 2.2     |
| 205.0   | 3610                                                                                                                       | 2905                 | 4315                 | 19.5                                 | 8.9     | 2.2     |
| 210.0   | 3236                                                                                                                       | 2596                 | 3877                 | 19.8                                 | 9.1     | 2.2     |
| 215.0   | 2907                                                                                                                       | 2324                 | 3490                 | 20.1                                 | 9.4     | 2.1     |
| 220.0   | 2617                                                                                                                       | 2085                 | 3148                 | 20.3                                 | 9.7     | 2.1     |
| 225.0   | 2360                                                                                                                       | 1874                 | 2845                 | 20.6                                 | 10.0    | 2.0     |
| 230.0   | 2132                                                                                                                       | 1688                 | 2575                 | 20.8                                 | 10.3    | 2.0     |
| 235.0   | 1929                                                                                                                       | 1523                 | 2335                 | 21.1                                 | 10.6    | 2.0     |
| 240.0   | 1749                                                                                                                       | 1376                 | 2121                 | 21.3                                 | 10.9    | 1.9     |
| 245.0   | 1588                                                                                                                       | 1246                 | 1930                 | 21.5                                 | 11.3    | 1.9     |
| 250.0   | 1445                                                                                                                       | 1130                 | 1759                 | 21.8                                 | 11.6    | 1.9     |
| 255.0   | 1316                                                                                                                       | 1027                 | 1605                 | 22.0                                 | 11.9    | 1.8     |
| 260.0   | 1201                                                                                                                       | 934.2                | 1468                 | 22.2                                 | 12.2    | 1.8     |
| 265.0   | 1097                                                                                                                       | 851.3                | 1344                 | 22.4                                 | 12.6    | 1.8     |
| 270.0   | 1004                                                                                                                       | 777.0                | 1232                 | 22.6                                 | 12.9    | 1.8     |
| 275.0   | 920.6                                                                                                                      | 710.2                | 1131                 | 22.9                                 | 13.2    | 1.7     |
| 280.0   | 844.9                                                                                                                      | 650.1                | 1040                 | 23.1                                 | 13.6    | 1.7     |
| 285.0   | 776.6                                                                                                                      | 595.9                | 957.3                | 23.3                                 | 13.9    | 1.7     |
| 290.0   | 714.7                                                                                                                      | 547.0                | 882.5                | 23.5                                 | 14.3    | 1.6     |
| 295.0   | 658.7                                                                                                                      | 502.8                | 814.5                | 23.7                                 | 14.6    | 1.6     |
| 300.0   | 607.8                                                                                                                      | 462.7                | 752.8                | 23.9                                 | 14.9    | 1.6     |

## Cautions and warnings

### General

See "Important notes" at the end of this document.

### Storage

- Store thermistors only in original packaging. Do not open the package before storage.
- Storage conditions in original packaging: storage temperature  $-25\text{ }^{\circ}\text{C} \dots +45\text{ }^{\circ}\text{C}$ , relative humidity  $\leq 75\%$  annual mean, maximum 95%, dew precipitation is inadmissible.
- Do not store SMDs where they are exposed to heat or direct sunlight. Otherwise, the packing material may be deformed or SMDs may stick together, causing problems during mounting.
- Avoid contamination of thermistors surface during storage, handling and processing.
- Avoid storage of thermistor in harmful environments like corrosive gases (SO<sub>x</sub>, Cl etc).
- After opening the factory seals, such as polyvinyl-sealed packages, use the SMDs as soon as possible.
- Solder thermistors after shipment from EPCOS within the time specified:  
SMDs: 12 months  
Leaded components: 24 months

### Handling

- NTC thermistors must not be dropped. Chip-offs must not be caused during handling of NTCs.
- Components must not be touched with bare hands. Gloves are recommended.
- Avoid contamination of thermistor surface during handling.

### Soldering

- Use resin-type flux or non-activated flux.
- Insufficient preheating may cause ceramic cracks.
- Rapid cooling by dipping in solvent is not recommended.
- Complete removal of flux is recommended.

### Mounting

- When NTC thermistors are encapsulated with sealing material or overmolded with plastic material, the precautions given in chapter "Mounting instructions", "Sealing, potting and overmolding" must be observed.
- Electrode must not be scratched before/during/after the mounting process.
- Contacts and housings used for assembly with thermistor have to be clean before mounting.
- During operation, the thermistor's surface temperature can be very high (ICL). Ensure that adjacent components are placed at a sufficient distance from the thermistor to allow for proper cooling of the thermistors.
- Ensure that adjacent materials are designed for operation at temperatures comparable to the surface temperature of the thermistor. Be sure that surrounding parts and materials can withstand this temperature.
- Make sure that thermistors (ICLs) are adequately ventilated to avoid overheating.
- Avoid contamination of thermistor surface during processing.

## Operation

- Use thermistors only within the specified operating temperature range.
- Use thermistors only within the specified voltage and current ranges (ICLs).
- Environmental conditions must not harm the thermistors. Use thermistors only in normal atmospheric conditions.
- Contact of NTC thermistors with any liquids and solvents should be prevented. It must be ensured that no water enters the NTC thermistor (e.g. through plug terminals). For measurement purposes (checking the specified resistance vs. temperature), the component must not be immersed in water but in suitable liquids (e.g. Galden).
- Avoid dewing and condensation.
- Be sure to provide an appropriate fail-safe function to prevent secondary product damage caused by malfunction (e.g. use VDR for limitation of overvoltage condition).

## Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application**. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of passive electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified**. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of a passive electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of a passive electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as "hazardous")**. Useful information on this will be found in our Material Data Sheets on the Internet ([www.epcos.com/material](http://www.epcos.com/material)). Should you have any more detailed questions, please contact our sales offices.
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