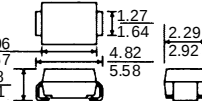
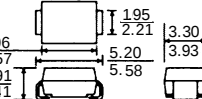
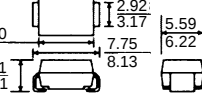
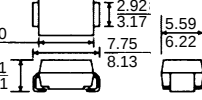
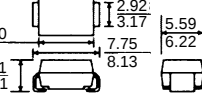
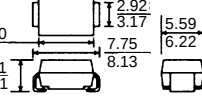
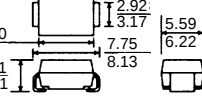


## SURFACE MOUNT

### Transient Voltage Suppressor

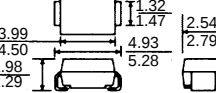
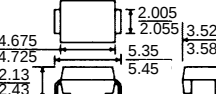
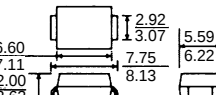
#### TRANSIENT VOLTAGE SUPPRESSOR DIODE

Operating Temperature: -55°C to 150°C

| RF Part Number | Working Peak Reverse Voltage<br>$V_{RWM}$ (V) | Break Down Voltage |           |                          | Maximum Clamping Voltage<br>$V_{RSM}$ (V) | Maximum Reverse Current & Leakage  |                     |                          |                                    |                     |                          |                                    |                     |     | Outline<br>(Dimensions in mm)                                                                                                                                               |  |
|----------------|-----------------------------------------------|--------------------|-----------|--------------------------|-------------------------------------------|------------------------------------|---------------------|--------------------------|------------------------------------|---------------------|--------------------------|------------------------------------|---------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                |                                               | $V_{BR}$ (V)       | @ IT (mA) | *A Size                  |                                           |                                    | *B Size             |                          |                                    | *C Size             |                          |                                    |                     |     |                                                                                                                                                                             |  |
|                |                                               |                    |           | Current<br>$I_{PPM}$ (A) |                                           | Leakage at $V_{NWM}$<br>$I_R$ (μA) | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R$ (μA) | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R$ (μA) | Device Marking Code |     |                                                                                                                                                                             |  |
|                |                                               |                    |           |                          |                                           |                                    |                     |                          |                                    |                     |                          |                                    |                     | Min |                                                                                                                                                                             |  |
| SM*J5.0        | 5                                             | 6.4                | 7.3       | 10                       | 9.6                                       | 32                                 | 800                 | AD                       | 62.5                               | 800                 | KD                       | 164                                | 1000                | GDD | <div><div>A size (SMA) DO-214AC</div><div>PART NUMBER EXAMPLE<br/>SMAJ7.0A</div></div>   |  |
| SM*J5.0A       | 5                                             | 6.4                | 7         | 10                       | 9.2                                       | 34                                 | 800                 | AE                       | 65.2                               | 800                 | KE                       | 171                                | 1000                | GDE |                                                                                                                                                                             |  |
| SM*J6.0        | 6                                             | 6.7                | 8.2       | 10                       | 11.4                                      | 27.6                               | 800                 | AF                       | 52.6                               | 800                 | KF                       | 138                                | 1000                | GDF |                                                                                                                                                                             |  |
| SM*J6.0A       | 6                                             | 6.7                | 7.4       | 10                       | 10.3                                      | 30.5                               | 800                 | AG                       | 58.3                               | 800                 | KG                       | 152                                | 1000                | GDG |                                                                                                                                                                             |  |
| SM*J6.5        | 6.5                                           | 7.2                | 8.8       | 10                       | 12.3                                      | 25.6                               | 500                 | AH                       | 48.7                               | 500                 | KH                       | 128                                | 500                 | GDH |                                                                                                                                                                             |  |
| SM*J6.5A       | 6.5                                           | 7.2                | 8         | 10                       | 11.2                                      | 28                                 | 500                 | AK                       | 53.6                               | 500                 | KK                       | 140                                | 500                 | GDK |                                                                                                                                                                             |  |
| SM*J7.0        | 7                                             | 7.8                | 9.5       | 10                       | 13.3                                      | 23.6                               | 200                 | AL                       | 45.1                               | 200                 | KL                       | 116                                | 200                 | GDL |                                                                                                                                                                             |  |
| SM*J7.0A       | 7                                             | 7.8                | 8.6       | 10                       | 12                                        | 26                                 | 200                 | AM                       | 50                                 | 200                 | KM                       | 131                                | 200                 | GDM |                                                                                                                                                                             |  |
| SM*J7.5        | 7.5                                           | 8.3                | 10.3      | 1                        | 14.3                                      | 22                                 | 100                 | AN                       | 42                                 | 100                 | KN                       | 110                                | 100                 | GDN |                                                                                                                                                                             |  |
| SM*J7.5A       | 7.5                                           | 8.3                | 9.2       | 1                        | 12.9                                      | 24.4                               | 100                 | AP                       | 46.5                               | 100                 | KP                       | 122                                | 100                 | GDP |                                                                                                                                                                             |  |
| SM*J8.0        | 8                                             | 8.9                | 10.9      | 1                        | 15                                        | 21                                 | 50                  | AQ                       | 40                                 | 50                  | KQ                       | 105                                | 50                  | GDQ | <div><div>B size (SMB) DO-214AA</div><div>PART NUMBER EXAMPLE<br/>SMBJ7.0A</div></div> |  |
| SM*J8.0A       | 8                                             | 8.9                | 9.8       | 1                        | 13.6                                      | 23                                 | 50                  | AR                       | 44.1                               | 50                  | KR                       | 115                                | 50                  | GDR |                                                                                                                                                                             |  |
| SM*J8.5        | 8.5                                           | 9.4                | 11.5      | 1                        | 15.9                                      | 19.8                               | 10                  | AS                       | 37.7                               | 20                  | KS                       | 99                                 | 25                  | GDS |                                                                                                                                                                             |  |
| SM*J8.5A       | 8.5                                           | 9.4                | 10.4      | 1                        | 14.4                                      | 21.8                               | 10                  | AT                       | 41.7                               | 20                  | KT                       | 109                                | 20                  | GDT |                                                                                                                                                                             |  |
| SM*J9.0        | 9                                             | 10                 | 12.2      | 1                        | 16.9                                      | 18.6                               | 5                   | AU                       | 35.5                               | 10                  | KU                       | 93                                 | 10                  | GDU |                                                                                                                                                                             |  |
| SM*J9.0A       | 9                                             | 10                 | 11.1      | 1                        | 15.4                                      | 20.4                               | 5                   | AV                       | 39                                 | 10                  | KV                       | 102                                | 10                  | GDV |                                                                                                                                                                             |  |
| SM*J10         | 10                                            | 11.1               | 13.6      | 1                        | 18.8                                      | 16.7                               | 5                   | AW                       | 31.9                               | 5                   | KW                       | 83                                 | 5                   | GDW |                                                                                                                                                                             |  |
| SM*J10A        | 10                                            | 11.1               | 12.3      | 1                        | 17                                        | 18.5                               | 5                   | AX                       | 35.3                               | 5                   | KX                       | 92                                 | 5                   | GDX |                                                                                                                                                                             |  |
| SM*J11         | 11                                            | 12.2               | 14.9      | 1                        | 20.1                                      | 15.6                               | 5                   | AY                       | 29.9                               | 5                   | KY                       | 78                                 | 5                   | GDY |                                                                                                                                                                             |  |
| SM*J11A        | 11                                            | 12.2               | 13.5      | 1                        | 18.2                                      | 17.3                               | 5                   | AZ                       | 33                                 | 5                   | KZ                       | 86                                 | 5                   | GDZ |                                                                                                                                                                             |  |
| SM*J12         | 12                                            | 13.3               | 16.3      | 1                        | 22                                        | 14.3                               | 5                   | BD                       | 27.3                               | 5                   | LD                       | 71                                 | 5                   | GED | <div><div>C size (SMC) DO-214AB</div><div>PART NUMBER EXAMPLE<br/>SMCJ7.0A</div></div> |  |
| SM*J12A        | 12                                            | 13.3               | 14.7      | 1                        | 19.9                                      | 15.8                               | 5                   | BE                       | 30.2                               | 5                   | LE                       | 79                                 | 5                   | GEE |                                                                                                                                                                             |  |
| SM*J13         | 13                                            | 14.4               | 17.6      | 1                        | 23.8                                      | 13                                 | 5                   | BF                       | 25                                 | 5                   | LF                       | 66                                 | 5                   | GEF |                                                                                                                                                                             |  |
| SM*J13A        | 13                                            | 14.4               | 15.9      | 1                        | 21.5                                      | 14.6                               | 5                   | BG                       | 27.9                               | 5                   | LG                       | 73                                 | 5                   | GEG |                                                                                                                                                                             |  |
| SM*J14         | 14                                            | 15.6               | 19.1      | 1                        | 25.8                                      | 12.2                               | 5                   | BH                       | 23.3                               | 5                   | LH                       | 61                                 | 5                   | GEH |                                                                                                                                                                             |  |
| SM*J14A        | 14                                            | 15.6               | 17.2      | 1                        | 23.2                                      | 13.5                               | 5                   | BK                       | 25.8                               | 5                   | LK                       | 67                                 | 5                   | GEK |                                                                                                                                                                             |  |
| SM*J15         | 15                                            | 16.7               | 20.4      | 1                        | 26.9                                      | 11.7                               | 5                   | BL                       | 22.3                               | 5                   | LL                       | 58                                 | 5                   | GEL |                                                                                                                                                                             |  |
| SM*J15A        | 15                                            | 16.7               | 18.5      | 1                        | 24.4                                      | 12.9                               | 5                   | BM                       | 24                                 | 5                   | LM                       | 64                                 | 5                   | GEM |                                                                                                                                                                             |  |
| SM*J16         | 16                                            | 17.8               | 21.8      | 1                        | 28.8                                      | 10.9                               | 5                   | BN                       | 20.8                               | 5                   | LN                       | 54                                 | 5                   | GEN |                                                                                                                                                                             |  |
| SM*J16A        | 16                                            | 17.8               | 19.7      | 1                        | 26                                        | 12                                 | 5                   | BP                       | 16.7                               | 5                   | LP                       | 60                                 | 5                   | GEP |                                                                                                                                                                             |  |
| SM*J17         | 17                                            | 18.9               | 23.1      | 1                        | 30.5                                      | 10.3                               | 5                   | BQ                       | 18.5                               | 5                   | LQ                       | 51                                 | 5                   | GEQ | <div><div>C size (SMC) DO-214AB</div><div>PART NUMBER EXAMPLE<br/>SMCJ7.0A</div></div> |  |
| SM*J17A        | 17                                            | 18.9               | 20.9      | 1                        | 27.6                                      | 11.4                               | 5                   | BR                       | 15.2                               | 5                   | LR                       | 57                                 | 5                   | GER |                                                                                                                                                                             |  |
| SM*J18         | 18                                            | 20                 | 24.4      | 1                        | 32.2                                      | 9.7                                | 5                   | BS                       | 16.9                               | 5                   | LS                       | 48                                 | 5                   | GES |                                                                                                                                                                             |  |
| SM*J18A        | 18                                            | 20                 | 22.1      | 1                        | 29.2                                      | 10.7                               | 5                   | BT                       | 14                                 | 5                   | LT                       | 53                                 | 5                   | GET |                                                                                                                                                                             |  |
| SM*J20         | 20                                            | 22.2               | 27.1      | 1                        | 35.8                                      | 8.7                                | 5                   | BU                       | 15.4                               | 5                   | LU                       | 43                                 | 5                   | GEU |                                                                                                                                                                             |  |
| SM*J20A        | 20                                            | 22.2               | 24.5      | 1                        | 32.4                                      | 9.7                                | 5                   | BV                       | 12.4                               | 5                   | LV                       | 48                                 | 5                   | GEV |                                                                                                                                                                             |  |
| SM*J22         | 22                                            | 24.4               | 29.8      | 1                        | 39.4                                      | 8                                  | 5                   | BW                       | 12                                 | 5                   | LW                       | 39                                 | 5                   | GEW |                                                                                                                                                                             |  |
| SM*J22A        | 22                                            | 24.4               | 26.9      | 1                        | 35.5                                      | 8.8                                | 5                   | BX                       | 13.2                               | 5                   | LX                       | 44                                 | 5                   | GEX |                                                                                                                                                                             |  |
| SM*J24         | 24                                            | 26.7               | 32.6      | 1                        | 43                                        | 7.3                                | 5                   | BY                       | 11.2                               | 5                   | LY                       | 36                                 | 5                   | GEY |                                                                                                                                                                             |  |
| SM*J24A        | 24                                            | 26.7               | 29.5      | 1                        | 38.9                                      | 8                                  | 5                   | BZ                       | 12.4                               | 5                   | LZ                       | 40                                 | 5                   | GEZ |                                                                                                                                                                             |  |
| SM*J26         | 26                                            | 28.9               | 35.3      | 1                        | 46.6                                      | 6.7                                | 5                   | CD                       | 10.2                               | 5                   | MD                       | 33                                 | 5                   | GGD | <div><div>C size (SMC) DO-214AB</div><div>PART NUMBER EXAMPLE<br/>SMCJ7.0A</div></div> |  |
| SM*J26A        | 26                                            | 28.9               | 31.9      | 1                        | 42.1                                      | 7.4                                | 5                   | CE                       | 11.3                               | 5                   | ME                       | 37                                 | 5                   | GGE |                                                                                                                                                                             |  |
| SM*J28         | 28                                            | 31.1               | 38        | 1                        | 50                                        | 6.3                                | 5                   | CF                       | 9.3                                | 5                   | MF                       | 31                                 | 5                   | GGF |                                                                                                                                                                             |  |
| SM*J28A        | 28                                            | 31.1               | 34.4      | 1                        | 45.4                                      | 6.9                                | 5                   | CG                       | 10.3                               | 5                   | MG                       | 34                                 | 5                   | GGG |                                                                                                                                                                             |  |
| SM*J30         | 30                                            | 33.3               | 40.7      | 1                        | 53.5                                      | 5.8                                | 5                   | CH                       | 8.4                                | 5                   | MH                       | 29                                 | 5                   | GGH |                                                                                                                                                                             |  |
| SM*J30A        | 30                                            | 33.3               | 36.8      | 1                        | 48.4                                      | 6.5                                | 5                   | CK                       | 9.3                                | 5                   | MK                       | 32                                 | 5                   | GGK |                                                                                                                                                                             |  |
| SM*J33         | 33                                            | 36.7               | 44.9      | 1                        | 59                                        | 5.3                                | 5                   | CL                       | 7.8                                | 5                   | ML                       | 26                                 | 5                   | GGL |                                                                                                                                                                             |  |
| SM*J33A        | 33                                            | 36.7               | 40.6      | 1                        | 53.3                                      | 5.9                                | 5                   | CM                       | 8.6                                | 5                   | MM                       | 29                                 | 5                   | GGM |                                                                                                                                                                             |  |
| SM*J36         | 36                                            | 40                 | 48.9      | 1                        | 64.3                                      | 4.8                                | 5                   | CN                       | 7.5                                | 5                   | MN                       | 24                                 | 5                   | GGN |                                                                                                                                                                             |  |
| SM*J36A        | 36                                            | 40                 | 44.2      | 1                        | 58.1                                      | 5.4                                | 5                   | CP                       | 8.3                                | 5                   | MP                       | 27                                 | 5                   | GGP |                                                                                                                                                                             |  |
| SM*J40         | 40                                            | 44.4               | 54.3      | 1                        | 71.4                                      | 4.4                                | 5                   | CQ                       | 7                                  | 5                   | MQ                       | 22                                 | 5                   | GGQ | <div><div>C size (SMC) DO-214AB</div><div>PART NUMBER EXAMPLE<br/>SMCJ7.0A</div></div> |  |
| SM*J40A        | 40                                            | 44.4               | 49.1      | 1                        | 64.5                                      | 4.8                                | 5                   | CR                       | 7.7                                | 5                   | MR                       | 24                                 | 5                   | GGR |                                                                                                                                                                             |  |
| SM*J43         | 43                                            | 47.8               | 58.4      | 1                        | 76.7                                      | 4.1                                | 5                   | CS                       | 6.6                                | 5                   | MS                       | 20                                 | 5                   | GGS |                                                                                                                                                                             |  |
| SM*J43A        | 43                                            | 47.8               | 52.8      | 1                        | 69.4                                      | 4.5                                | 5                   | CT                       | 7.3                                | 5                   | MT                       | 22                                 | 5                   | GGT |                                                                                                                                                                             |  |
| SM*J45         | 45                                            | 50                 | 61.1      | 1                        | 80.3                                      | 3.9                                | 5                   | CU                       | 6.2                                | 5                   | MU                       | 9                                  | 5                   | GGU |                                                                                                                                                                             |  |
| SM*J45A        | 45                                            | 50                 | 55.3      | 1                        | 72.7                                      | 4.3                                | 5                   | CV                       | 6.9                                | 5                   | MV                       | 21                                 | 5                   | GGV |                                                                                                                                                                             |  |
| SM*J48         | 48                                            | 53.3               | 65.1      | 1                        | 85.5                                      | 3.6                                | 5                   | CW                       | 5.8                                | 5                   | MW                       | 18                                 | 5                   | GGW |                                                                                                                                                                             |  |
| SM*J48A        | 48                                            | 53.3               | 58.9      | 1                        | 77.4                                      | 4                                  | 5                   | CX                       | 6.4                                | 5                   | MX                       | 20                                 | 5                   | GGX |                                                                                                                                                                             |  |
| SM*J51         | 51                                            | 56.7               | 69.3      | 1                        | 91.1                                      | 3.4                                | 5                   | CY                       | 5.6                                | 5                   | MY                       | 17                                 | 5                   | GGY |                                                                                                                                                                             |  |
| SM*J51A        | 51                                            | 56.7               | 62.7      | 1                        | 82.4                                      | 3.8                                | 5                   | CZ                       | 6.2                                | 5                   | MZ                       | 19                                 | 5                   | GGZ |                                                                                                                                                                             |  |
| SM*J54         | 54                                            | 60                 | 73.3      | 1                        | 96.3                                      | 3.2                                | 5                   | RD                       | 5.3                                | 5                   | ND                       | 16                                 | 5                   | GHD | <div><div>C size (SMC) DO-214AB</div><div>PART NUMBER EXAMPLE<br/>SMCJ7.0A</div></div> |  |
| SM*J54A        | 54                                            | 60                 | 66        | 1                        | 87.1                                      | 3.6                                | 5                   | RE                       | 5.8                                | 5                   | NE                       | 18                                 | 5                   | GHE |                                                                                                                                                                             |  |
| SM*J58         | 58                                            | 64.4               | 78.7      | 1                        | 103                                       | 3                                  | 5                   | RF                       | 4.8                                | 5                   | NF                       | 15                                 | 5                   | GHF |                                                                                                                                                                             |  |
| SM*J58A        | 58                                            | 64.4               | 71.2      | 1                        | 93.6                                      | 3.3                                | 5                   | RG                       | 5.3                                | 5                   | NG                       | 16                                 | 5                   | GHG |                                                                                                                                                                             |  |

### TRANSIENT VOLTAGE SUPPRESSOR DIODE

Operating Temperature: -55°C to 150°C

| RF Part Number | Working Peak Reverse Voltage<br>$V_{RWM}$ (V) | Break Down Voltage |               | @ IT<br>$V_{RSM}$ (V) | Maximum Clamping Voltage<br>$V_{RSM}$ (V) | Maximum Reverse Current & Leakage |                                      |                     |                          |                                      |                     |                          |                                      |                     | Outline (Dimensions in mm)                                                                                          |
|----------------|-----------------------------------------------|--------------------|---------------|-----------------------|-------------------------------------------|-----------------------------------|--------------------------------------|---------------------|--------------------------|--------------------------------------|---------------------|--------------------------|--------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------|
|                |                                               | $V_{BR}$ (V)       | $V_{RSM}$ (V) |                       |                                           | *A Size                           |                                      |                     | *B Size                  |                                      |                     | *C Size                  |                                      |                     |                                                                                                                     |
|                |                                               |                    |               |                       |                                           | Current<br>$I_{PPM}$ (A)          | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device Marking Code |                                                                                                                     |
|                |                                               |                    |               |                       |                                           |                                   |                                      |                     |                          |                                      |                     |                          |                                      |                     |                                                                                                                     |
| SM*J60         | 60                                            | 67                 | 82            | 1                     | 107                                       | 2.9                               | 5                                    | RH                  | 4.5                      | 5                                    | NH                  | 14                       | 5                                    | GGH                 | <b>A size (SMA) DO-214AC</b><br> |
| SM*J60A        | 60                                            | 67                 | 74            | 1                     | 96.8                                      | 3.2                               | 5                                    | RK                  | 4.9                      | 5                                    | NK                  | 16                       | 5                                    | GGK                 |                                                                                                                     |
| SM*J64         | 64                                            | 71                 | 87            | 1                     | 114                                       | 2.7                               | 5                                    | RL                  | 4.3                      | 5                                    | NL                  | 13.8                     | 5                                    | GGL                 |                                                                                                                     |
| SM*J64A        | 64                                            | 71                 | 79            | 1                     | 103                                       | 3                                 | 5                                    | RM                  | 4.7                      | 5                                    | NM                  | 15                       | 5                                    | GGM                 |                                                                                                                     |
| SM*J70         | 70                                            | 78                 | 95            | 1                     | 125                                       | 2.5                               | 5                                    | RN                  | 3.9                      | 5                                    | NN                  | 12.6                     | 5                                    | GGN                 | <b>PART NUMBER EXAMPLE</b><br>SMAJ7.0A                                                                              |
| SM*J70A        | 70                                            | 78                 | 86            | 1                     | 113                                       | 2.7                               | 5                                    | RP                  | 4.4                      | 5                                    | NP                  | 13.9                     | 5                                    | GGP                 |                                                                                                                     |
| SM*J75         | 75                                            | 83                 | 102           | 1                     | 134                                       | 2.3                               | 5                                    | RQ                  | 3.8                      | 5                                    | NQ                  | 11.7                     | 5                                    | GGQ                 |                                                                                                                     |
| SM*J75A        | 75                                            | 83                 | 92            | 1                     | 121                                       | 2.6                               | 5                                    | RR                  | 4.1                      | 5                                    | NR                  | 13                       | 5                                    | GGR                 |                                                                                                                     |
| SM*J78         | 78                                            | 87                 | 106           | 1                     | 139                                       | 2.2                               | 5                                    | RS                  | 3.4                      | 5                                    | NS                  | 11.3                     | 5                                    | GGS                 | <b>B size (SMB) DO-214AA</b><br> |
| SM*J78A        | 78                                            | 87                 | 96            | 1                     | 126                                       | 2.5                               | 5                                    | RT                  | 3.7                      | 5                                    | NT                  | 12.5                     | 5                                    | GGT                 |                                                                                                                     |
| SM*J85         | 85                                            | 94                 | 115           | 1                     | 151                                       | 2                                 | 5                                    | RU                  | 3.9                      | 5                                    | NU                  | 10.4                     | 5                                    | GGU                 |                                                                                                                     |
| SM*J85A        | 85                                            | 94                 | 104           | 1                     | 137                                       | 2.2                               | 5                                    | RV                  | 4.4                      | 5                                    | NV                  | 11.5                     | 5                                    | GGV                 |                                                                                                                     |
| SM*J90         | 90                                            | 100                | 122           | 1                     | 160                                       | 1.9                               | 5                                    | RW                  | 3.8                      | 5                                    | NW                  | 9.8                      | 5                                    | GGW                 | <b>PART NUMBER EXAMPLE</b><br>SMBJ7.0A                                                                              |
| SM*J90A        | 90                                            | 100                | 111           | 1                     | 146                                       | 2.1                               | 5                                    | RY                  | 4.1                      | 5                                    | NX                  | 10.7                     | 5                                    | GGX                 |                                                                                                                     |
| SM*J100        | 100                                           | 111                | 136           | 1                     | 179                                       | 1.7                               | 5                                    | RX                  | 3.4                      | 5                                    | NY                  | 8.8                      | 5                                    | GGY                 |                                                                                                                     |
| SM*J100A       | 100                                           | 111                | 123           | 1                     | 162                                       | 1.9                               | 5                                    | RZ                  | 3.7                      | 5                                    | NZ                  | 9.7                      | 5                                    | GGZ                 |                                                                                                                     |
| SM*J110        | 110                                           | 122                | 149           | 1                     | 196                                       | 1.6                               | 5                                    | SD                  | 3                        | 5                                    | PD                  | 8                        | 5                                    | GHD                 | <b>C size (SMC) DO-214AB</b><br> |
| SM*J110A       | 110                                           | 122                | 135           | 1                     | 177                                       | 1.7                               | 5                                    | SE                  | 3.4                      | 5                                    | PE                  | 8.9                      | 5                                    | GHE                 |                                                                                                                     |
| SM*J120        | 120                                           | 133                | 163           | 1                     | 214                                       | 1.4                               | 5                                    | SF                  | 2.8                      | 5                                    | PF                  | 7.3                      | 5                                    | GHF                 |                                                                                                                     |
| SM*J120A       | 120                                           | 133                | 147           | 1                     | 193                                       | 1.6                               | 5                                    | SG                  | 3.1                      | 5                                    | PG                  | 8.1                      | 5                                    | GHG                 |                                                                                                                     |
| SM*J130        | 130                                           | 144                | 176           | 1                     | 231                                       | 1.3                               | 5                                    | SH                  | 2.6                      | 5                                    | PH                  | 6.8                      | 5                                    | GHH                 | <b>PART NUMBER EXAMPLE</b><br>SMCJ7.0A                                                                              |
| SM*J130A       | 130                                           | 144                | 159           | 1                     | 209                                       | 1.5                               | 5                                    | SK                  | 2.9                      | 5                                    | PK                  | 7.5                      | 5                                    | GHK                 |                                                                                                                     |
| SM*J150        | 150                                           | 167                | 204           | 1                     | 268                                       | 1.1                               | 5                                    | SL                  | 2.2                      | 5                                    | PL                  | 5.8                      | 5                                    | GHL                 |                                                                                                                     |
| SM*J150A       | 150                                           | 167                | 185           | 1                     | 243                                       | 1.3                               | 5                                    | SM                  | 2.5                      | 5                                    | PM                  | 6.4                      | 5                                    | GHM                 |                                                                                                                     |
| SM*J160        | 160                                           | 178                | 218           | 1                     | 287                                       | 1                                 | 5                                    | SN                  | 2.1                      | 5                                    | PN                  | 5.4                      | 5                                    | GHN                 |                                                                                                                     |
| SM*J160A       | 160                                           | 178                | 197           | 1                     | 259                                       | 1.2                               | 5                                    | SP                  | 2.3                      | 5                                    | PP                  | 6                        | 5                                    | GHP                 |                                                                                                                     |
| SM*J170        | 170                                           | 189                | 231           | 1                     | 304                                       | 1                                 | 5                                    | SQ                  | 2                        | 5                                    | PQ                  | 5.1                      | 5                                    | GHQ                 |                                                                                                                     |
| SM*J170A       | 170                                           | 189                | 209           | 1                     | 275                                       | 1.1                               | 5                                    | SO                  | 2.2                      | 5                                    | PO                  | 5.7                      | 5                                    | GHO                 |                                                                                                                     |

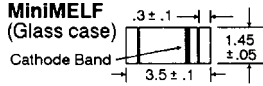
### ZENER DIODE

Operating Temperature: -65°C to 150°C

| RFE Part Number | Cross-Reference | Marking Code | Nominal Zener Voltage<br>$@I_{ZR}$ | Dynamic Impedance<br>$@I_{ZT}$ | Test Current  | Dynamic Impedance<br>$@I_{ZK}$ | Test Current  | Max Rev Leakage Current<br>$@V_R$ | Test Voltage | Package | Outline (Dimensions in mm)        |
|-----------------|-----------------|--------------|------------------------------------|--------------------------------|---------------|--------------------------------|---------------|-----------------------------------|--------------|---------|-----------------------------------|
|                 |                 |              | $V_Z$ (V)                          | $Z_{ZT}$ (Ω)                   | $I_{ZT}$ (mA) | $Z_{ZK}$ (Ω)                   | $I_{ZK}$ (mA) | $I_R$ (μA)                        | $V_R$ (V)    | Reel    |                                   |
|                 |                 |              |                                    |                                |               |                                |               |                                   |              |         |                                   |
| MMBZ5226B       | BZX84C3V3       | 8A           | 3.3                                | 28                             | 20.0          | 1600                           | 0.25          | 25.0                              | 1.0          | 3000    | <b>SOT-23 (L)</b><br>TO-236AB<br> |
| MMBZ5227B       | BZX84C3V6       | 8B           | 3.6                                | 24                             | 20.0          | 1700                           | 0.25          | 15.0                              | 1.0          | 3000    |                                   |
| MMBZ5228B       | BZX84C3V9       | 8C           | 3.9                                | 23                             | 20.0          | 1900                           | 0.25          | 10.0                              | 1.0          | 3000    |                                   |
| MMBZ5229B       | BZX84C4V3       | 8D           | 4.3                                | 22                             | 20.0          | 2000                           | 0.25          | 5.0                               | 1.0          | 3000    |                                   |
| MMBZ5230B       | BZX84C4V7       | 8E           | 4.7                                | 19                             | 20.0          | 1900                           | 0.25          | 5.0                               | 2.0          | 3000    |                                   |
| MMBZ5231B       | BZX84C5V1       | 8F           | 5.1                                | 17                             | 20.0          | 1600                           | 0.25          | 5.0                               | 2.0          | 3000    |                                   |
| MMBZ5232B       | BZX84C5V6       | 8G           | 5.6                                | 11                             | 20.0          | 1600                           | 0.25          | 5.0                               | 3.0          | 3000    |                                   |
| MMBZ5233B       |                 | 8H           | 6.0                                | 7                              | 20.0          | 1600                           | 0.25          | 5.0                               | 3.5          | 3000    |                                   |
| MMBZ5234B       | BZX84C6V2       | 8J           | 6.2                                | 7                              | 20.0          | 1000                           | 0.25          | 5.0                               | 4.0          | 3000    |                                   |
| MMBZ5235B       | BZX84C6V8       | 8K           | 6.8                                | 5                              | 20.0          | 750                            | 0.25          | 3.0                               | 5.0          | 3000    |                                   |
| MMBZ5236B       | BZX84C7V5       | 8L           | 7.5                                | 6                              | 20.0          | 500                            | 0.25          | 3.0                               | 6.0          | 3000    |                                   |
| MMBZ5237B       | BZX84C8V2       | 8M           | 8.2                                | 8                              | 20.0          | 500                            | 0.25          | 3.0                               | 6.5          | 3000    |                                   |
| MMBZ5238B       |                 | 8N           | 8.7                                | 8                              | 20.0          | 600                            | 0.25          | 3.0                               | 6.5          | 3000    |                                   |
| MMBZ5239B       | BZX84C9V1       | 8P           | 9.1                                | 10                             | 20.0          | 600                            | 0.25          | 3.0                               | 7.0          | 3000    |                                   |
| MMBZ5240B       | BZX84C10        | 8Q           | 10.0                               | 17                             | 20.0          | 600                            | 0.25          | 3.0                               | 8.0          | 3000    |                                   |
| MMBZ5241B       | BZX84C11        | 8R           | 11.0                               | 22                             | 20.0          | 600                            | 0.25          | 2.0                               | 8.4          | 3000    |                                   |
| MMBZ5242B       | BZX84C12        | 8S           | 12.0                               | 30                             | 20.0          | 600                            | 0.25          | 1.0                               | 9.1          | 3000    |                                   |
| MMBZ5243B       | BZX84C13        | 8T           | 13.0                               | 13                             | 9.5           | 600                            | 0.25          | 0.5                               | 9.9          | 3000    |                                   |
| MMBZ5244B       |                 | 8U           | 14.0                               | 15                             | 9.0           | 600                            | 0.25          | 0.1                               | 10.0         | 3000    |                                   |
| MMBZ5245B       | BZX84C15        | 8V           | 15.0                               | 16                             | 8.5           | 600                            | 0.25          | 0.1                               | 11.0         | 3000    |                                   |
| MMBZ5246B       | BZX84C16        | 8W           | 16.0                               | 17                             | 7.8           | 600                            | 0.25          | 0.1                               | 12.0         | 3000    |                                   |
| MMBZ5247B       |                 | 8X           | 17.0                               | 19                             | 7.4           | 600                            | 0.25          | 0.1                               | 13.0         | 3000    |                                   |
| MMBZ5248B       | BZX84C18        | 8Y           | 18.0                               | 21                             | 7.0           | 600                            | 0.25          | 0.1                               | 14.0         | 3000    |                                   |
| MMBZ5249B       |                 | 8Z           | 19.0                               | 23                             | 6.6           | 600                            | 0.25          | 0.1                               | 14.0         | 3000    |                                   |
| MMBZ5250B       | BZX84C20        | 81A          | 20.0                               | 25                             | 6.2           | 600                            | 0.25          | 0.1                               | 15.0         | 3000    |                                   |
| MMBZ5251B       | BZX84C22        | 81B          | 22.0                               | 29                             | 5.6           | 600                            | 0.25          | 0.1                               | 17.0         | 3000    |                                   |
| MMBZ5252B       | BZX84C24        | 81C          | 24.0                               | 33                             | 5.2           | 600                            | 0.25          | 0.1                               | 18.0         | 3000    |                                   |
| MMBZ5253B       |                 | 81D          | 25.0                               | 35                             | 5.0           | 600                            | 0.25          | 0.1                               | 19.0         | 3000    |                                   |
| MMBZ5254B       | BZX84C27        | 81E          | 27.0                               | 41                             | 4.6           | 600                            | 0.25          | 0.1                               | 21.0         | 3000    |                                   |
| MMBZ5255B       |                 | 81F          | 28.0                               | 44                             | 4.5           | 600                            | 0.25          | 0.1                               | 21.0         | 3000    |                                   |
| MMBZ5256B       | BZX84C30        | 81G          | 30.0                               | 49                             | 4.2           | 600                            | 0.25          | 0.1                               | 23.0         | 3000    |                                   |
| MMBZ5257B       | BZX84C33        | 81H          | 33.0                               | 58                             | 3.8           | 700                            | 0.25          | 0.1                               | 25.0         | 3000    |                                   |

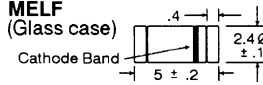
### ZENER DIODE

Operating Temperature: -65°C to 150°C

| RFE Part Number | Cross-Reference | Nominal Zener Voltage @I <sub>ZT</sub> | Test Current         | Dynamic Impedance @I <sub>ZT</sub> | Dynamic Impedance @I <sub>ZK</sub> | Typical Zener Coefficient | Max Rev Leakage Current @ V <sub>R</sub> | Test Voltage       | Max Regulator Current | Package | Outline (Dimensions in mm)                                                          |
|-----------------|-----------------|----------------------------------------|----------------------|------------------------------------|------------------------------------|---------------------------|------------------------------------------|--------------------|-----------------------|---------|-------------------------------------------------------------------------------------|
|                 |                 | V <sub>Z</sub> (V)                     | I <sub>ZT</sub> (mA) | Z <sub>ZT</sub> (Ω)                | Z <sub>ZK</sub> (Ω)                | α <sub>VZ</sub> (%/K)     | I <sub>R</sub> (μA)                      | V <sub>R</sub> (V) | I <sub>S</sub> (mA)   | Reel    |                                                                                     |
| LL5226B         |                 | 3.3                                    | 20                   | 28                                 | 1600                               | -0.070                    | 25.0                                     | 1.0                | 138.0                 | 2500    |  |
| LL5227B         |                 | 3.6                                    | 20                   | 24                                 | 1700                               | -0.065                    | 15.0                                     | 1.0                | 126.0                 | 2500    |                                                                                     |
| LL5228B         |                 | 3.9                                    | 20                   | 23                                 | 1900                               | -0.060                    | 10.0                                     | 1.0                | 115.0                 | 2500    |                                                                                     |
| LL5229B         |                 | 4.3                                    | 20                   | 22                                 | 2000                               | -0.055                    | 5.0                                      | 1.0                | 106.0                 | 2500    |                                                                                     |
| LL5230B         |                 | 4.7                                    | 20                   | 19                                 | 1900                               | -0.030                    | 5.0                                      | 2.0                | 97.0                  | 2500    |                                                                                     |
| LL5231B         |                 | 5.1                                    | 20                   | 17                                 | 1600                               | 0.030                     | 5.0                                      | 2.0                | 89.0                  | 2500    |                                                                                     |
| LL5232B         |                 | 5.6                                    | 20                   | 11                                 | 1600                               | 0.038                     | 5.0                                      | 3.0                | 81.0                  | 2500    |                                                                                     |
| LL5233B         |                 | 6.0                                    | 20                   | 7                                  | 1600                               | 0.038                     | 5.0                                      | 3.5                | 76.0                  | 2500    |                                                                                     |
| LL5234B         |                 | 6.2                                    | 20                   | 7                                  | 1000                               | 0.045                     | 5.0                                      | 4.0                | 73.0                  | 2500    |                                                                                     |
| LL5235B         |                 | 6.8                                    | 20                   | 5                                  | 750                                | 0.050                     | 3.0                                      | 5.0                | 67.0                  | 2500    |                                                                                     |
| LL5236B         |                 | 7.5                                    | 20                   | 6                                  | 500                                | 0.058                     | 3.0                                      | 6.0                | 61.0                  | 2500    |                                                                                     |
| LL5237B         |                 | 8.2                                    | 20                   | 8                                  | 500                                | 0.062                     | 3.0                                      | 6.5                | 55.0                  | 2500    |                                                                                     |
| LL5238B         |                 | 8.7                                    | 20                   | 8                                  | 600                                | 0.065                     | 3.0                                      | 6.5                | 52.0                  | 2500    |                                                                                     |
| LL5239B         |                 | 9.1                                    | 20                   | 10                                 | 600                                | 0.068                     | 3.0                                      | 7.0                | 50.0                  | 2500    |                                                                                     |
| LL5240B         |                 | 10.0                                   | 20                   | 17                                 | 600                                | 0.075                     | 3.0                                      | 8.0                | 45.0                  | 2500    |                                                                                     |
| LL5241B         |                 | 11.0                                   | 20                   | 22                                 | 600                                | 0.076                     | 2.0                                      | 8.4                | 41.0                  | 2500    |                                                                                     |
| LL5242B         |                 | 12.0                                   | 20                   | 30                                 | 600                                | 0.077                     | 1.0                                      | 9.1                | 38.0                  | 2500    |                                                                                     |
| LL5243B         |                 | 13.0                                   | 9.5                  | 13                                 | 600                                | 0.079                     | 0.5                                      | 9.9                | 35.0                  | 2500    |                                                                                     |
| LL5244B         |                 | 14.0                                   | 9                    | 15                                 | 600                                | 0.082                     | 0.1                                      | 10.0               | 32.0                  | 2500    |                                                                                     |
| LL5245B         |                 | 15.0                                   | 8.5                  | 16                                 | 600                                | 0.082                     | 0.1                                      | 11.0               | 30.0                  | 2500    |                                                                                     |
| LL5246B         |                 | 16.0                                   | 7.8                  | 17                                 | 600                                | 0.083                     | 0.1                                      | 12.0               | 28.0                  | 2500    |                                                                                     |
| LL5247B         |                 | 17.0                                   | 7.4                  | 19                                 | 600                                | 0.084                     | 0.1                                      | 13.0               | 27.0                  | 2500    |                                                                                     |
| LL5248B         |                 | 18.0                                   | 7                    | 21                                 | 600                                | 0.085                     | 0.1                                      | 14.0               | 25.0                  | 2500    |                                                                                     |
| LL5249B         |                 | 19.0                                   | 6.6                  | 23                                 | 600                                | 0.085                     | 0.1                                      | 14.0               | 24.0                  | 2500    |                                                                                     |
| LL5250B         |                 | 20.0                                   | 6.2                  | 25                                 | 600                                | 0.086                     | 0.1                                      | 15.0               | 23.0                  | 2500    |                                                                                     |
| LL5251B         |                 | 22.0                                   | 5.6                  | 29                                 | 600                                | 0.087                     | 0.1                                      | 17.0               | 21.2                  | 2500    |                                                                                     |
| LL5252B         |                 | 24.0                                   | 5.2                  | 33                                 | 600                                | 0.088                     | 0.1                                      | 18.0               | 19.1                  | 2500    |                                                                                     |
| LL5253B         |                 | 25.0                                   | 5                    | 35                                 | 600                                | 0.089                     | 0.1                                      | 19.0               | 18.2                  | 2500    |                                                                                     |
| LL5254B         |                 | 27.0                                   | 4.6                  | 41                                 | 600                                | 0.090                     | 0.1                                      | 21.0               | 16.8                  | 2500    |                                                                                     |
| LL5255B         |                 | 28.0                                   | 4.5                  | 44                                 | 600                                | 0.091                     | 0.1                                      | 21.0               | 16.2                  | 2500    |                                                                                     |
| LL5256B         |                 | 30.0                                   | 4.2                  | 49                                 | 600                                | 0.091                     | 0.1                                      | 23.0               | 15.1                  | 2500    |                                                                                     |
| LL5257B         |                 | 33.0                                   | 3.8                  | 58                                 | 700                                | 0.092                     | 0.1                                      | 25.0               | 13.8                  | 2500    |                                                                                     |
| LL5258B         |                 | 36.0                                   | 3.4                  | 70                                 | 700                                | 0.093                     | 0.1                                      | 27.0               | 12.6                  | 2500    |                                                                                     |
| LL5259B         |                 | 39.0                                   | 3.2                  | 80                                 | 800                                | 0.094                     | 0.1                                      | 30.0               | 11.5                  | 2500    |                                                                                     |
| LL5260B         |                 | 43.0                                   | 3                    | 93                                 | 900                                | 0.095                     | 0.1                                      | 33.0               | 10.6                  | 2500    |                                                                                     |
| LL5261B         |                 | 47.0                                   | 2.7                  | 150                                | 1000                               | 0.095                     | 0.1                                      | 36.0               | 9.7                   | 2500    |                                                                                     |
| LL5262B         |                 | 51.0                                   | 2.5                  | 125                                | 1100                               | 0.095                     | 0.1                                      | 39.0               | 8.9                   | 2500    |                                                                                     |

### ZENER DIODE

Operating Temperature: -65°C to 150°C

| RFE Part Number | Cross-Reference | Nominal Zener Voltage @I <sub>ZT</sub> | Test Current         | Dynamic Impedance @I <sub>ZT</sub> | Dynamic Impedance @I <sub>ZK</sub> | Test Current         | Max Rev Leakage Current @ V <sub>R</sub> | Test Voltage       | Max Regulator Current | Max Regulator Current @ 50°C | Package | Outline (Dimensions in mm)                                                            |
|-----------------|-----------------|----------------------------------------|----------------------|------------------------------------|------------------------------------|----------------------|------------------------------------------|--------------------|-----------------------|------------------------------|---------|---------------------------------------------------------------------------------------|
|                 |                 | V <sub>Z</sub> (V)                     | I <sub>ZT</sub> (mA) | Z <sub>ZT</sub> (Ω)                | Z <sub>ZK</sub> (Ω)                | I <sub>ZK</sub> (mA) | I <sub>R</sub> (μA)                      | V <sub>R</sub> (V) | I <sub>S</sub> (mA)   | I <sub>RM</sub> (mA)         | Reel    |                                                                                       |
| LL4729A         |                 | 3.6                                    | 69.0                 | 10.0                               | 400                                | 1.00                 | 100                                      | 1.0                | 1260                  | 252                          | 5000    |  |
| LL4730A         |                 | 3.9                                    | 64.0                 | 9.0                                | 400                                | 1.00                 | 50                                       | 1.0                | 1170                  | 234                          | 5000    |                                                                                       |
| LL4731A         |                 | 4.3                                    | 58.0                 | 9.0                                | 400                                | 1.00                 | 10                                       | 1.0                | 1085                  | 217                          | 5000    |                                                                                       |
| LL4732A         |                 | 4.7                                    | 53.0                 | 8.0                                | 500                                | 1.00                 | 10                                       | 1.0                | 965                   | 193                          | 5000    |                                                                                       |
| LL4733A         |                 | 5.1                                    | 49.0                 | 7.0                                | 550                                | 1.00                 | 10                                       | 1.0                | 890                   | 176                          | 5000    |                                                                                       |
| LL4734A         |                 | 5.6                                    | 45.0                 | 5.0                                | 600                                | 1.00                 | 10                                       | 2.0                | 810                   | 162                          | 5000    |                                                                                       |
| LL4735A         |                 | 6.2                                    | 41.0                 | 2.0                                | 700                                | 1.00                 | 10                                       | 3.0                | 730                   | 146                          | 5000    |                                                                                       |
| LL4736A         |                 | 6.8                                    | 37.0                 | 3.5                                | 700                                | 1.00                 | 10                                       | 4.0                | 660                   | 133                          | 5000    |                                                                                       |
| LL4737A         |                 | 7.5                                    | 34.0                 | 4.0                                | 700                                | 0.50                 | 10                                       | 5.0                | 605                   | 121                          | 5000    |                                                                                       |
| LL4738A         |                 | 8.2                                    | 31.0                 | 4.5                                | 700                                | 0.50                 | 10                                       | 6.0                | 550                   | 110                          | 5000    |                                                                                       |
| LL4739A         |                 | 9.1                                    | 28.0                 | 5.0                                | 700                                | 0.50                 | 10                                       | 7.0                | 500                   | 100                          | 5000    |                                                                                       |
| LL4740A         |                 | 10.0                                   | 25.0                 | 7.0                                | 700                                | 0.25                 | 10                                       | 7.6                | 454                   | 91                           | 5000    |                                                                                       |
| LL4741A         |                 | 11.0                                   | 23.0                 | 8.0                                | 700                                | 0.25                 | 5                                        | 8.4                | 414                   | 83                           | 5000    |                                                                                       |
| LL4742A         |                 | 12.0                                   | 21.0                 | 9.0                                | 700                                | 0.25                 | 5                                        | 9.1                | 380                   | 76                           | 5000    |                                                                                       |
| LL4743A         |                 | 13.0                                   | 19.0                 | 10.0                               | 700                                | 0.25                 | 5                                        | 9.9                | 344                   | 69                           | 5000    |                                                                                       |
| LL4744A         |                 | 15.0                                   | 17.0                 | 14.0                               | 700                                | 0.25                 | 5                                        | 11.4               | 304                   | 61                           | 5000    |                                                                                       |
| LL4745A         |                 | 16.0                                   | 15.5                 | 16.0                               | 700                                | 0.25                 | 5                                        | 12.2               | 285                   | 57                           | 5000    |                                                                                       |
| LL4746A         |                 | 18.0                                   | 14.0                 | 20.0                               | 750                                | 0.25                 | 5                                        | 13.7               | 250                   | 50                           | 5000    |                                                                                       |
| LL4747A         |                 | 20.0                                   | 12.5                 | 22.0                               | 750                                | 0.25                 | 5                                        | 15.2               | 225                   | 45                           | 5000    |                                                                                       |
| LL4748A         |                 | 22.0                                   | 11.5                 | 23.0                               | 750                                | 0.25                 | 5                                        | 16.7               | 205                   | 41                           | 5000    |                                                                                       |
| LL4749A         |                 | 24.0                                   | 10.5                 | 25.0                               | 750                                | 0.25                 | 5                                        | 18.2               | 190                   | 38                           | 5000    |                                                                                       |
| LL4750A         |                 | 27.0                                   | 9.5                  | 35.0                               | 750                                | 0.25                 | 5                                        | 20.6               | 170                   | 34                           | 5000    |                                                                                       |
| LL4751A         |                 | 30.0                                   | 8.5                  | 40.0                               | 1000                               | 0.25                 | 5                                        | 22.8               | 150                   | 30                           | 5000    |                                                                                       |
| LL4752A         |                 | 33.0                                   | 7.5                  | 45.0                               | 1000                               | 0.25                 | 5                                        | 25.1               | 135                   | 27                           | 5000    |                                                                                       |
| LL4753A         |                 | 36.0                                   | 7.0                  | 50.0                               | 1000                               | 0.25                 | 5                                        | 27.4               | 125                   | 25                           | 5000    |                                                                                       |
| LL4754A         |                 | 39.0                                   | 6.5                  | 60.0                               | 1000                               | 0.25                 | 5                                        | 29.7               | 115                   | 23                           | 5000    |                                                                                       |
| LL4755A         |                 | 42.0                                   | 6.0                  | 70.0                               | 1500                               | 0.25                 | 5                                        | 32.7               | 110                   | 22                           | 5000    |                                                                                       |
| LL4756A         |                 | 47.0                                   | 5.5                  | 80.0                               | 1500                               | 0.25                 | 5                                        | 35.8               | 98                    | 19                           | 5000    |                                                                                       |
| LL4757A         |                 | 51.0                                   | 5.0                  | 95.0                               | 1500                               | 0.25                 | 5                                        | 38.8               | 90                    | 18                           | 5000    |                                                                                       |
| LL4758A         |                 | 56.0                                   | 4.5                  | 110.0                              | 2000                               | 0.25                 | 5                                        | 42.6               | 80                    | 16                           | 5000    |                                                                                       |
| LL4759A         |                 | 62.0                                   | 4.0                  | 125.0                              | 2000                               | 0.25                 | 5                                        | 47.1               | 70                    | 14                           | 5000    |                                                                                       |
| LL4760A         |                 | 68.0                                   | 3.7                  | 150.0                              | 2000                               | 0.25                 | 5                                        | 51.7               | 65                    | 13                           | 5000    |                                                                                       |
| LL4761A         |                 | 75.0                                   | 3.3                  | 175.0                              | 2000                               | 0.25                 | 5                                        | 56.0               | 60                    | 12                           | 5000    |                                                                                       |
| LL4762A         |                 | 82.0                                   | 3.0                  | 200.0                              | 3000                               | 0.25                 | 5                                        | 62.2               | 55                    | 11                           | 5000    |                                                                                       |
| LL4763A         |                 | 91.0                                   | 2.8                  | 250.0                              | 3000                               | 0.25                 | 5                                        | 69.2               | 50                    | 10                           | 5000    |                                                                                       |
| LL4764A         |                 | 100.0                                  | 2.5                  | 350.0                              | 3000                               | 0.25                 | 5                                        | 76.0               | 45                    | 9                            | 5000    |                                                                                       |