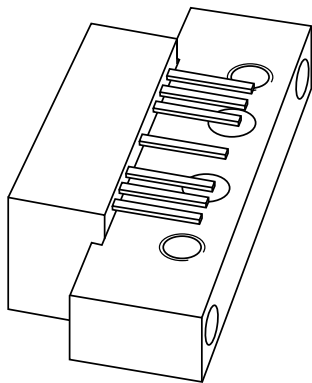


# DATA SHEET



## **BGD804**

860 MHz, 20 dB gain power  
doubler amplifier

Product specification  
Supersedes data of 1999 Mar 26

2001 Nov 01



# 860 MHz, 20 dB gain power doubler amplifier

## BGD804

### FEATURES

- Excellent linearity
- Extremely low noise
- Silicon nitride passivation
- Rugged construction
- Gold metallization ensures excellent reliability.

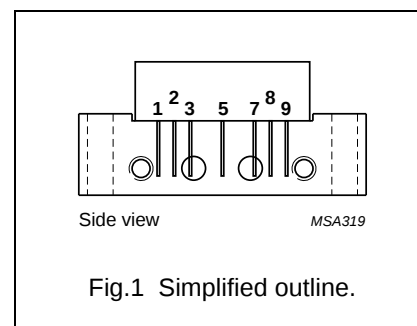
### APPLICATIONS

CATV systems in the 40 to 860 MHz frequency range.

### PINNING - SOT115J

| PIN | DESCRIPTION     |
|-----|-----------------|
| 1   | input           |
| 2   | common          |
| 3   | common          |
| 5   | +V <sub>B</sub> |
| 7   | common          |
| 8   | common          |
| 9   | output          |

### PIN CONFIGURATION



### DESCRIPTION

Hybrid amplifier module in a SOT115J package operating at a voltage supply of 24 V (DC).

### QUICK REFERENCE DATA

| SYMBOL           | PARAMETER                      | CONDITIONS            | MIN. | MAX. | UNIT |
|------------------|--------------------------------|-----------------------|------|------|------|
| G <sub>p</sub>   | power gain                     | f = 50 MHz            | 19.5 | 20.5 | dB   |
|                  |                                | f = 860 MHz           | 20   | –    | dB   |
| I <sub>tot</sub> | total current consumption (DC) | V <sub>B</sub> = 24 V | –    | 410  | mA   |

### LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 60134).

| SYMBOL           | PARAMETER                           | MIN. | MAX. | UNIT |
|------------------|-------------------------------------|------|------|------|
| V <sub>i</sub>   | RF input voltage                    | –    | 65   | dBmV |
| T <sub>stg</sub> | storage temperature                 | –40  | +100 | °C   |
| T <sub>mb</sub>  | operating mounting base temperature | –20  | +100 | °C   |
| V <sub>B</sub>   | supply voltage                      | –    | 25   | V    |

# 860 MHz, 20 dB gain power doubler amplifier

BGD804

## CHARACTERISTICS

**Table 1** Bandwidth 40 to 860 MHz;  $V_B = 24\text{ V}$ ;  $T_{\text{case}} = 35\text{ }^{\circ}\text{C}$ ;  $Z_S = Z_L = 75\text{ }\Omega$

| SYMBOL           | PARAMETER                         | CONDITIONS                                                           | MIN. | TYP.      | MAX.      | UNIT |
|------------------|-----------------------------------|----------------------------------------------------------------------|------|-----------|-----------|------|
| $G_p$            | power gain                        | $f = 50\text{ MHz}$                                                  | 19.5 | 20        | 20.5      | dB   |
|                  |                                   | $f = 860\text{ MHz}$                                                 | 20   | 21        | –         | dB   |
| SL               | slope cable equivalent            | $f = 40\text{ to }860\text{ MHz}$                                    | 0.2  | 1.1       | 2         | dB   |
| FL               | flatness of frequency response    | $f = 40\text{ to }860\text{ MHz}$                                    | –    | $\pm 0.2$ | $\pm 0.5$ | dB   |
| $S_{11}$         | input return losses               | $f = 40\text{ to }80\text{ MHz}$                                     | 20   | 28        | –         | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                    | 18.5 | 23        | –         | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                   | 17   | 20        | –         | dB   |
|                  |                                   | $f = 320\text{ to }640\text{ MHz}$                                   | 15.5 | 20        | –         | dB   |
|                  |                                   | $f = 640\text{ to }860\text{ MHz}$                                   | 14   | 20        | –         | dB   |
| $S_{22}$         | output return losses              | $f = 40\text{ to }80\text{ MHz}$                                     | 20   | 28.5      | –         | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                    | 18.5 | 28        | –         | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                   | 17   | 24        | –         | dB   |
|                  |                                   | $f = 320\text{ to }640\text{ MHz}$                                   | 15.5 | 19        | –         | dB   |
|                  |                                   | $f = 640\text{ to }860\text{ MHz}$                                   | 14   | 19        | –         | dB   |
| $S_{21}$         | phase response                    | $f = 50\text{ MHz}$                                                  | –45  | –         | +45       | deg  |
| CTB              | composite triple beat             | 49 channels flat; $V_o = 47\text{ dBmV}$ ;<br>measured at 859.25 MHz | –    | –64       | –61       | dB   |
| $X_{\text{mod}}$ | cross modulation                  | 49 channels flat; $V_o = 47\text{ dBmV}$ ;<br>measured at 55.25 MHz  | –    | –65.5     | –62       | dB   |
| CSO              | composite second order distortion | 49 channels flat; $V_o = 47\text{ dBmV}$ ;<br>measured at 860.5 MHz  | –    | –63       | –58       | dB   |
| $d_2$            | second order distortion           | note 1                                                               | –    | –73       | –67       | dB   |
| $V_o$            | output voltage                    | $d_{\text{im}} = -60\text{ dB}$ ; note 2                             | +60  | –61.5     | –         | dBmV |
| F                | noise figure                      | $f = 50\text{ MHz}$                                                  | –    | 4.5       | 5         | dB   |
|                  |                                   | $f = 550\text{ MHz}$                                                 | –    | –         | 6         | dB   |
|                  |                                   | $f = 650\text{ MHz}$                                                 | –    | –         | 6         | dB   |
|                  |                                   | $f = 750\text{ MHz}$                                                 | –    | –         | 6.5       | dB   |
|                  |                                   | $f = 860\text{ MHz}$                                                 | –    | 6.5       | 7.5       | dB   |
| $I_{\text{tot}}$ | total current consumption (DC)    | note 3                                                               | –    | 395       | 410       | mA   |

## Notes

- $f_p = 55.25\text{ MHz}$ ;  $V_p = 44\text{ dBmV}$ ;  
 $f_q = 805.25\text{ MHz}$ ;  $V_q = 44\text{ dBmV}$ ;  
measured at  $f_p + f_q = 860.5\text{ MHz}$ .
- Measured according to DIN45004B;  
 $f_p = 851.25\text{ MHz}$ ;  $V_p = V_o$ ;  
 $f_q = 858.25\text{ MHz}$ ;  $V_q = V_o - 6\text{ dB}$ ;  
 $f_r = 860.25\text{ MHz}$ ;  $V_r = V_o - 6\text{ dB}$ ;  
measured at  $f_p + f_q - f_r = 849.25\text{ MHz}$ .
- The module normally operates at  $V_B = 24\text{ V}$ , but is able to withstand supply transients up to 30 V.

# 860 MHz, 20 dB gain power doubler amplifier

BGD804

**Table 2** Bandwidth 40 to 860 MHz;  $V_B = 24\text{ V}$ ;  $T_{\text{case}} = 35\text{ °C}$ ;  $Z_S = Z_L = 75\text{ }\Omega$ 

| SYMBOL           | PARAMETER                         | CONDITIONS                                                         | MIN. | TYP.      | MAX.      | UNIT |
|------------------|-----------------------------------|--------------------------------------------------------------------|------|-----------|-----------|------|
| $G_p$            | power gain                        | $f = 50\text{ MHz}$                                                | 19.5 | 20        | 20.5      | dB   |
|                  |                                   | $f = 860\text{ MHz}$                                               | 20   | 21        | –         | dB   |
| SL               | slope cable equivalent            | $f = 40\text{ to }860\text{ MHz}$                                  | 0.2  | 1.1       | 2         | dB   |
| FL               | flatness of frequency response    | $f = 40\text{ to }860\text{ MHz}$                                  | –    | $\pm 0.2$ | $\pm 0.5$ | dB   |
| $S_{11}$         | input return losses               | $f = 40\text{ to }80\text{ MHz}$                                   | 20   | 28        | –         | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                  | 18.5 | 23        | –         | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                 | 17   | 20        | –         | dB   |
|                  |                                   | $f = 320\text{ to }640\text{ MHz}$                                 | 15.5 | 20        | –         | dB   |
|                  |                                   | $f = 640\text{ to }860\text{ MHz}$                                 | 14   | 20        | –         | dB   |
| $S_{22}$         | output return losses              | $f = 40\text{ to }80\text{ MHz}$                                   | 20   | 28.5      | –         | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                  | 18.5 | 28        | –         | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                 | 17   | 24        | –         | dB   |
|                  |                                   | $f = 320\text{ to }640\text{ MHz}$                                 | 15.5 | 19        | –         | dB   |
|                  |                                   | $f = 640\text{ to }860\text{ MHz}$                                 | 14   | 19        | –         | dB   |
| $S_{21}$         | phase response                    | $f = 50\text{ MHz}$                                                | –45  | –         | +45       | deg  |
| CTB              | composite triple beat             | 129 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 859.25 MHz | –    | –54       | –53       | dB   |
| $X_{\text{mod}}$ | cross modulation                  | 129 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 55.25 MHz  | –    | –62       | –61       | dB   |
| CSO              | composite second order distortion | 129 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 860.5 MHz  | –    | –60.5     | –54       | dB   |
| $d_2$            | second order distortion           | note 1                                                             | –    | –73       | –67       | dB   |
| $V_o$            | output voltage                    | $d_{\text{im}} = -60\text{ dB}$ ; note 2                           | +60  | –61.5     | –         | dBmV |
| F                | noise figure                      | see Table 1                                                        | –    | –         | –         | dB   |
| $I_{\text{tot}}$ | total current consumption (DC)    | note 3                                                             | –    | 395       | 410       | mA   |

**Notes**

- $f_p = 55.25\text{ MHz}$ ;  $V_p = 44\text{ dBmV}$ ;  
 $f_q = 805.25\text{ MHz}$ ;  $V_q = 44\text{ dBmV}$ ;  
measured at  $f_p + f_q = 860.5\text{ MHz}$ .
- Measured according to DIN45004B;  
 $f_p = 851.25\text{ MHz}$ ;  $V_p = V_o$ ;  
 $f_q = 858.25\text{ MHz}$ ;  $V_q = V_o - 6\text{ dB}$ ;  
 $f_r = 860.25\text{ MHz}$ ;  $V_r = V_o - 6\text{ dB}$ ;  
measured at  $f_p + f_q - f_r = 849.25\text{ MHz}$ .
- The module normally operates at  $V_B = 24\text{ V}$ , but is able to withstand supply transients up to 30 V.

# 860 MHz, 20 dB gain power doubler amplifier

BGD804

**Table 3** Bandwidth 40 to 750 MHz;  $V_B = 24$  V;  $T_{case} = 35$  °C;  $Z_S = Z_L = 75 \Omega$ 

| SYMBOL    | PARAMETER                         | CONDITIONS                                                 | MIN. | TYP. | MAX.       | UNIT |
|-----------|-----------------------------------|------------------------------------------------------------|------|------|------------|------|
| $G_p$     | power gain                        | $f = 50$ MHz                                               | 19.5 | 20   | 20.5       | dB   |
|           |                                   | $f = 750$ MHz                                              | 20   | 20.8 | –          | dB   |
| SL        | slope cable equivalent            | $f = 40$ to 750 MHz                                        | 0.2  | –    | 2          | dB   |
| FL        | flatness of frequency response    | $f = 40$ to 750 MHz                                        | –    | –    | $\pm 0.45$ | dB   |
| $S_{11}$  | input return losses               | $f = 40$ to 80 MHz                                         | 20   | 28   | –          | dB   |
|           |                                   | $f = 80$ to 160 MHz                                        | 18.5 | 23   | –          | dB   |
|           |                                   | $f = 160$ to 320 MHz                                       | 17   | 20   | –          | dB   |
|           |                                   | $f = 320$ to 640 MHz                                       | 15.5 | 20   | –          | dB   |
|           |                                   | $f = 640$ to 750 MHz                                       | 14   | 20   | –          | dB   |
| $S_{22}$  | output return losses              | $f = 40$ to 80 MHz                                         | 20   | 28.5 | –          | dB   |
|           |                                   | $f = 80$ to 160 MHz                                        | 18.5 | 28   | –          | dB   |
|           |                                   | $f = 160$ to 320 MHz                                       | 17   | 24   | –          | dB   |
|           |                                   | $f = 320$ to 640 MHz                                       | 15.5 | 19   | –          | dB   |
|           |                                   | $f = 640$ to 750 MHz                                       | 14   | 19   | –          | dB   |
| $S_{21}$  | phase response                    | $f = 50$ MHz                                               | –45  | –    | +45        | deg  |
| CTB       | composite triple beat             | 110 channels flat; $V_o = 44$ dBmV; measured at 745.25 MHz | –    | –59  | –57        | dB   |
| $X_{mod}$ | cross modulation                  | 110 channels flat; $V_o = 44$ dBmV; measured at 55.25 MHz  | –    | –64  | –62        | dB   |
| CSO       | composite second order distortion | 110 channels flat; $V_o = 44$ dBmV; measured at 746.5 MHz  | –    | –62  | –56        | dB   |
| $d_2$     | second order distortion           | note 1                                                     | –    | –    | –68        | dB   |
| $V_o$     | output voltage                    | $d_{im} = -60$ dB; note 2                                  | 63   | –    | –          | dBmV |
| F         | noise figure                      | see Table 1                                                | –    | –    | –          | dB   |
| $I_{tot}$ | total current consumption (DC)    | note 3                                                     | –    | 395  | 410        | mA   |

**Notes**

- $f_p = 55.25$  MHz;  $V_p = 44$  dBmV;  
 $f_q = 691.25$  MHz;  $V_q = 44$  dBmV;  
measured at  $f_p + f_q = 746.5$  MHz.
- Measured according to DIN45004B;  
 $f_p = 740.25$  MHz;  $V_p = V_o$ ;  
 $f_q = 747.25$  MHz;  $V_q = V_o - 6$  dB;  
 $f_r = 749.25$  MHz;  $V_r = V_o - 6$  dB;  
measured at  $f_p + f_q - f_r = 738.25$  MHz.
- The module normally operates at  $V_B = 24$  V, but is able to withstand supply transients up to 30 V.

# 860 MHz, 20 dB gain power doubler amplifier

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**Table 4** Bandwidth 40 to 650 MHz;  $V_B = 24\text{ V}$ ;  $T_{\text{case}} = 35\text{ }^{\circ}\text{C}$ ;  $Z_S = Z_L = 75\text{ }\Omega$ 

| SYMBOL           | PARAMETER                         | CONDITIONS                                                        | MIN. | TYP. | MAX.       | UNIT |
|------------------|-----------------------------------|-------------------------------------------------------------------|------|------|------------|------|
| $G_p$            | power gain                        | $f = 50\text{ MHz}$                                               | 19.5 | 20   | 20.5       | dB   |
|                  |                                   | $f = 650\text{ MHz}$                                              | 20   | 20.7 | –          | dB   |
| SL               | slope cable equivalent            | $f = 40\text{ to }650\text{ MHz}$                                 | 0.2  | –    | 2          | dB   |
| FL               | flatness of frequency response    | $f = 40\text{ to }650\text{ MHz}$                                 | –    | –    | $\pm 0.35$ | dB   |
| $S_{11}$         | input return losses               | $f = 40\text{ to }80\text{ MHz}$                                  | 20   | 28   | –          | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                 | 18.5 | 23   | –          | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                | 17   | 20   | –          | dB   |
|                  |                                   | $f = 320\text{ to }650\text{ MHz}$                                | 15   | 20   | –          | dB   |
| $S_{22}$         | output return losses              | $f = 40\text{ to }80\text{ MHz}$                                  | 20   | 28.5 | –          | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                 | 18.5 | 28   | –          | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                | 17   | 24   | –          | dB   |
|                  |                                   | $f = 320\text{ to }650\text{ MHz}$                                | 15   | 19   | –          | dB   |
| $S_{21}$         | phase response                    | $f = 50\text{ MHz}$                                               | –45  | –    | +45        | deg  |
| CTB              | composite triple beat             | 94 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 649.25 MHz | –    | –    | –60        | dB   |
| $X_{\text{mod}}$ | cross modulation                  | 94 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 55.25 MHz  | –    | –    | –62        | dB   |
| CSO              | composite second order distortion | 94 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 650.5 MHz  | –    | –    | –58        | dB   |
| $d_2$            | second order distortion           | note 1                                                            | –    | –    | –69        | dB   |
| $V_o$            | output voltage                    | $d_{\text{im}} = -60\text{ dB}$ ; note 2                          | 65   | –    | –          | dBmV |
| F                | noise figure                      | see Table 1                                                       | –    | –    | –          | dB   |
| $I_{\text{tot}}$ | total current consumption (DC)    | note 3                                                            | –    | 395  | 410        | mA   |

**Notes**

- $f_p = 55.25\text{ MHz}$ ;  $V_p = 44\text{ dBmV}$ ;  
 $f_q = 595.25\text{ MHz}$ ;  $V_q = 44\text{ dBmV}$ ;  
measured at  $f_p + f_q = 650.5\text{ MHz}$ .
- Measured according to DIN45004B;  
 $f_p = 640.25\text{ MHz}$ ;  $V_p = V_o$ ;  
 $f_q = 647.25\text{ MHz}$ ;  $V_q = V_o - 6\text{ dB}$ ;  
 $f_r = 649.25\text{ MHz}$ ;  $V_r = V_o - 6\text{ dB}$ ;  
measured at  $f_p + f_q - f_r = 638.25\text{ MHz}$ .
- The module normally operates at  $V_B = 24\text{ V}$ , but is able to withstand supply transients up to 30 V.

# 860 MHz, 20 dB gain power doubler amplifier

BGD804

**Table 5** Bandwidth 40 to 550 MHz;  $V_B = 24\text{ V}$ ;  $T_{\text{case}} = 35\text{ }^{\circ}\text{C}$ ;  $Z_S = Z_L = 75\text{ }\Omega$ 

| SYMBOL           | PARAMETER                         | CONDITIONS                                                        | MIN. | TYP. | MAX.       | UNIT |
|------------------|-----------------------------------|-------------------------------------------------------------------|------|------|------------|------|
| $G_p$            | power gain                        | $f = 50\text{ MHz}$                                               | 19.5 | 20   | 20.5       | dB   |
|                  |                                   | $f = 550\text{ MHz}$                                              | 20   | 20.6 | –          | dB   |
| SL               | slope cable equivalent            | $f = 40\text{ to }550\text{ MHz}$                                 | 0.2  | –    | 2          | dB   |
| FL               | flatness of frequency response    | $f = 40\text{ to }550\text{ MHz}$                                 | –    | –    | $\pm 0.35$ | dB   |
| $S_{11}$         | input return losses               | $f = 40\text{ to }80\text{ MHz}$                                  | 20   | 28   | –          | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                 | 18.5 | 23   | –          | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                | 17   | 20   | –          | dB   |
|                  |                                   | $f = 320\text{ to }550\text{ MHz}$                                | 16   | 20   | –          | dB   |
| $S_{22}$         | output return losses              | $f = 40\text{ to }80\text{ MHz}$                                  | 20   | 28.5 | –          | dB   |
|                  |                                   | $f = 80\text{ to }160\text{ MHz}$                                 | 18.5 | 28   | –          | dB   |
|                  |                                   | $f = 160\text{ to }320\text{ MHz}$                                | 17   | 24   | –          | dB   |
|                  |                                   | $f = 320\text{ to }550\text{ MHz}$                                | 16   | 19   | –          | dB   |
| $S_{21}$         | phase response                    | $f = 50\text{ MHz}$                                               | –45  | –    | +45        | deg  |
| CTB              | composite triple beat             | 77 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 547.25 MHz | –    | –66  | –64        | dB   |
| $X_{\text{mod}}$ | cross modulation                  | 77 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 55.25 MHz  | –    | –67  | –64        | dB   |
| CSO              | composite second order distortion | 77 channels flat; $V_o = 44\text{ dBmV}$ ; measured at 548.5 MHz  | –    | –67  | –62        | dB   |
| $d_2$            | second order distortion           | note 1                                                            | –    | –    | –72        | dB   |
| $V_o$            | output voltage                    | $d_{\text{im}} = -60\text{ dB}$ ; note 2                          | 66   | –    | –          | dBmV |
| F                | noise figure                      | see Table 1                                                       | –    | –    | –          | dB   |
| $I_{\text{tot}}$ | total current consumption (DC)    | note 3                                                            | –    | 395  | 410        | mA   |

**Notes**

- $f_p = 55.25\text{ MHz}$ ;  $V_p = 44\text{ dBmV}$ ;  
 $f_q = 493.25\text{ MHz}$ ;  $V_q = 44\text{ dBmV}$ ;  
measured at  $f_p + f_q = 548.5\text{ MHz}$ .
- Measured according to DIN45004B;  
 $f_p = 540.25\text{ MHz}$ ;  $V_p = V_o$ ;  
 $f_q = 547.25\text{ MHz}$ ;  $V_q = V_o - 6\text{ dB}$ ;  
 $f_r = 549.25\text{ MHz}$ ;  $V_r = V_o - 6\text{ dB}$ ;  
measured at  $f_p + f_q - f_r = 538.25\text{ MHz}$ .
- The module normally operates at  $V_B = 24\text{ V}$ , but is able to withstand supply transients up to 30 V.

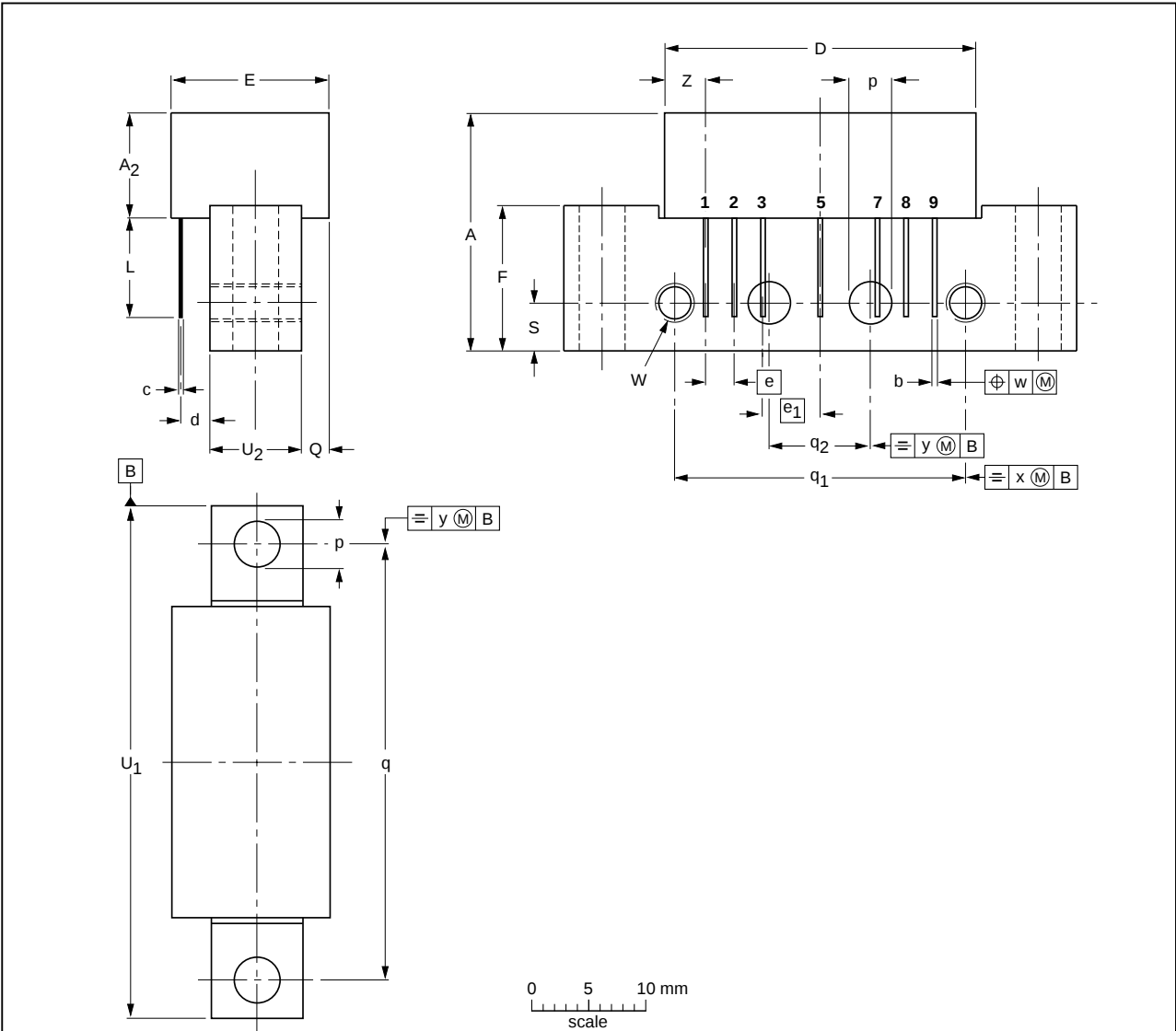
860 MHz, 20 dB gain power doubler  
amplifier

BGD804

PACKAGE OUTLINE

Rectangular single-ended package; aluminium flange; 2 vertical mounting holes;  
2 x 6-32 UNC and 2 extra horizontal mounting holes; 7 gold-plated in-line leads

SOT115J



DIMENSIONS (mm are the original dimensions)

| UNIT | A<br>max. | A <sub>2</sub><br>max. | b            | c    | D<br>max. | d            | E<br>max. | e    | e <sub>1</sub> | F    | L<br>min. | p            | Q<br>max. | q    | q <sub>1</sub> | q <sub>2</sub> | S   | U <sub>1</sub> | U <sub>2</sub> | W           | w    | x   | y   | Z<br>max. |
|------|-----------|------------------------|--------------|------|-----------|--------------|-----------|------|----------------|------|-----------|--------------|-----------|------|----------------|----------------|-----|----------------|----------------|-------------|------|-----|-----|-----------|
| mm   | 20.8      | 9.5                    | 0.51<br>0.38 | 0.25 | 27.2      | 2.04<br>2.54 | 13.75     | 2.54 | 5.08           | 12.7 | 8.8       | 4.15<br>3.85 | 2.4       | 38.1 | 25.4           | 10.2           | 4.2 | 44.75<br>44.25 | 8.2<br>7.8     | 6-32<br>UNC | 0.25 | 0.7 | 0.1 | 3.8       |

| OUTLINE<br>VERSION | REFERENCES |       |       |  | EUROPEAN<br>PROJECTION | ISSUE DATE           |
|--------------------|------------|-------|-------|--|------------------------|----------------------|
|                    | IEC        | JEDEC | JEITA |  |                        |                      |
| SOT115J            |            |       |       |  |                        | 04-02-04<br>10-06-18 |

# 860 MHz, 20 dB gain power doubler amplifier

BGD804

## DATA SHEET STATUS

| DOCUMENT STATUS <sup>(1)</sup> | PRODUCT STATUS <sup>(2)</sup> | DEFINITION                                                                            |
|--------------------------------|-------------------------------|---------------------------------------------------------------------------------------|
| Objective data sheet           | Development                   | This document contains data from the objective specification for product development. |
| Preliminary data sheet         | Qualification                 | This document contains data from the preliminary specification.                       |
| Product data sheet             | Production                    | This document contains the product specification.                                     |

## Notes

1. Please consult the most recently issued document before initiating or completing a design.
2. The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL <http://www.nxp.com>.

## DEFINITIONS

**Product specification** — The information and data provided in a Product data sheet shall define the specification of the product as agreed between NXP Semiconductors and its customer, unless NXP Semiconductors and customer have explicitly agreed otherwise in writing. In no event however, shall an agreement be valid in which the NXP Semiconductors product is deemed to offer functions and qualities beyond those described in the Product data sheet.

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## 860 MHz, 20 dB gain power doubler amplifier

BGD804

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# **NXP Semiconductors**

***provides High Performance Mixed Signal and Standard Product solutions that leverage its leading RF, Analog, Power Management, Interface, Security and Digital Processing expertise***

## **Customer notification**

This data sheet was changed to reflect the new company name NXP Semiconductors, including new legal definitions and disclaimers. No changes were made to the technical content, except for package outline drawings which were updated to the latest version.

## **Contact information**

For additional information please visit: <http://www.nxp.com>

For sales offices addresses send e-mail to: [salesaddresses@nxp.com](mailto:salesaddresses@nxp.com)

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Printed in The Netherlands

R77/03/pp11

Date of release: 2001 Nov 01