

# Plug-In Amplifier

50Ω Low Power 10 to 2500 MHz

## AMP-25G

### Features

- wideband, 10 to 2500 MHz
- general purpose gain block
- +15V at 35mA typical
- hermetic, TO-8 can

### Applications

- military and high reliability
- small signal amplifier
- buffer amplifier



CASE STYLE: PP120  
PRICE: \$84.45 ea. Qty. (1-9)

### Amplifier Electrical Specifications

| MODEL NO. | FREQUENCY (MHz) |       | GAIN (dB) |               | MAXIMUM POWER (dBm)       |                   | DYNAMIC RANGE |                | VSWR (:1) Typ. |     | DC POWER      |                   |
|-----------|-----------------|-------|-----------|---------------|---------------------------|-------------------|---------------|----------------|----------------|-----|---------------|-------------------|
|           | $f_L$           | $f_U$ | Min.      | Flatness Max. | Output (1 dB Compr.) Typ. | Input (no damage) | NF (dB) Typ.  | IP3 (dBm) Typ. | In             | Out | Volt (V) Nom. | Current (mA) Max. |
| AMP-25G   | 10              | 800   | 18        | ±1.4          | 12.2                      | +13               | 3.0           | +26            | 1.4            | 1.2 | 15            | 55                |
|           | 800             | 1600  | 15        | ±1.6          | 12.5                      | +13               | 3.0           | +28            | 1.6            | 1.2 | 15            | 55                |
|           | 1600            | 2500  | 15        | ±1.0          | 10.0                      | +13               | 4.5           | +22            | 1.8            | 1.3 | 15            | 55                |

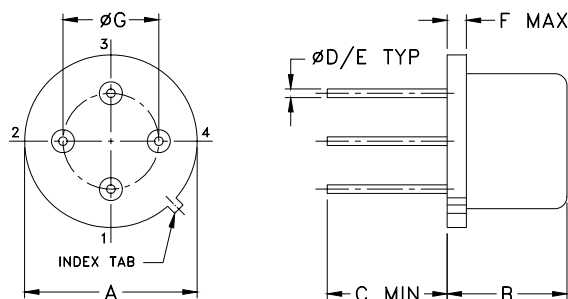
### Pin Connections

|             |   |
|-------------|---|
| RF IN       | 2 |
| RF OUT      | 4 |
| DC          | 1 |
| GROUND      | 3 |
| CASE GROUND | 3 |

### Maximum Ratings

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Operating Temperature                                           | -54°C to 85°C  |
| Storage Temperature                                             | -55°C to 100°C |
| DC Voltage                                                      | +17V Max.      |
| Permanent damage may occur if any of these limits are exceeded. |                |

### Outline Drawing



### Outline Dimensions (inch/mm)

| A     | B    | C    | D    | E    | F    | G    | wt    |
|-------|------|------|------|------|------|------|-------|
| .50   | .21  | .15  | .016 | .020 | .04  | .300 | grams |
| 12.70 | 5.33 | 3.81 | 0.41 | 0.51 | 1.02 | 7.62 | 1.5   |

### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
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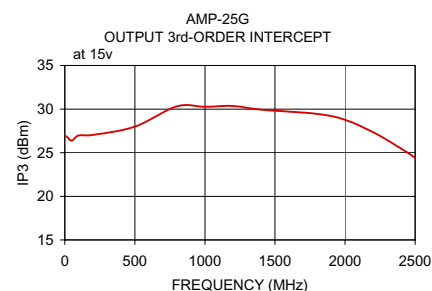
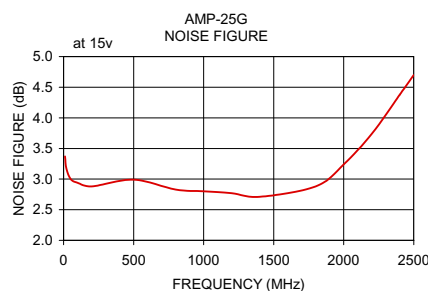
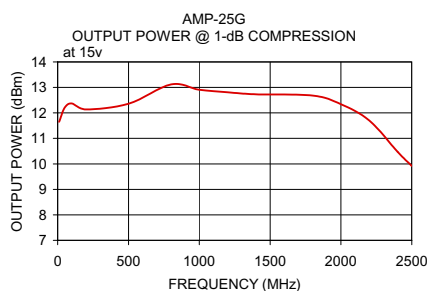
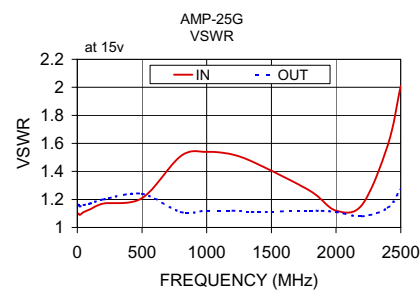
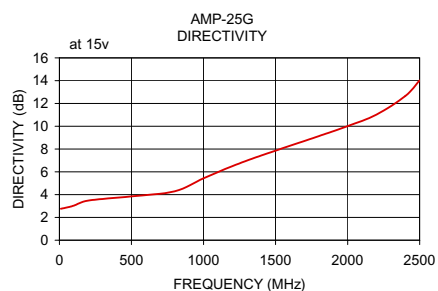
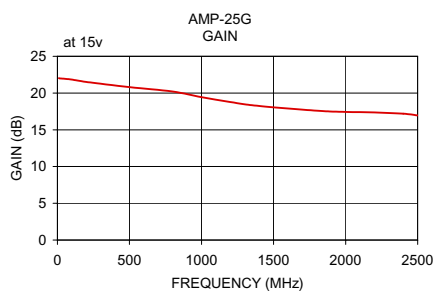
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A  
M95506  
EDB-030202  
AMP-25G  
BLUE C/RS/CP  
070118  
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# Typical Performance Data/Curves

## AMP-25G

| FREQUENCY<br>(MHz) | GAIN<br>(dB) | DIRECTIVITY<br>(dB) | VSWR<br>(:1) |      | NOISE<br>FIGURE<br>(dB) | POUT at<br>1 dB COMPR.<br>(dBm) | IP3<br>(dBm) |
|--------------------|--------------|---------------------|--------------|------|-------------------------|---------------------------------|--------------|
|                    | 15V          |                     | IN           | OUT  |                         | 15V                             |              |
| 10.00              | 22.02        | 2.76                | 1.10         | 1.16 | 3.37                    | 11.65                           | 26.90        |
| 20.00              | 21.99        | 2.78                | 1.09         | 1.15 | 3.17                    | 11.79                           | 26.75        |
| 50.00              | 21.95        | 2.87                | 1.11         | 1.16 | 3.00                    | 12.21                           | 26.39        |
| 100.00             | 21.83        | 3.04                | 1.13         | 1.17 | 2.94                    | 12.37                           | 26.99        |
| 200.00             | 21.51        | 3.48                | 1.17         | 1.20 | 2.88                    | 12.14                           | 27.04        |
| 500.00             | 20.81        | 3.85                | 1.21         | 1.24 | 2.99                    | 12.36                           | 28.00        |
| 800.00             | 20.21        | 4.29                | 1.51         | 1.11 | 2.83                    | 13.12                           | 30.32        |
| 1000.00            | 19.44        | 5.43                | 1.54         | 1.12 | 2.80                    | 12.91                           | 30.26        |
| 1200.00            | 18.78        | 6.49                | 1.52         | 1.12 | 2.77                    | 12.81                           | 30.35        |
| 1400.00            | 18.25        | 7.44                | 1.45         | 1.11 | 2.71                    | 12.73                           | 29.94        |
| 1800.00            | 17.59        | 9.13                | 1.26         | 1.12 | 2.88                    | 12.68                           | 29.45        |
| 2000.00            | 17.44        | 10.01               | 1.12         | 1.11 | 3.24                    | 12.34                           | 28.76        |
| 2200.00            | 17.36        | 11.02               | 1.16         | 1.08 | 3.74                    | 11.70                           | 27.35        |
| 2400.00            | 17.19        | 12.65               | 1.59         | 1.14 | 4.38                    | 10.47                           | 25.47        |
| 2500.00            | 16.95        | 14.03               | 2.01         | 1.27 | 4.70                    | 9.92                            | 24.40        |



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