

RF AMPLIFIER

MODEL BXMP1026

Medium Power Amplifier

Available As: BXMP1026, Connectorized Housing

Features

- High Power Output: Greater Than 2 Watts
- High Third Order Intercept: +43 dBm Typical
- High Gain: 31 dB Typical

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +66 dBm (Typ.)
 Second Order Two Tone Intercept Point +63 dBm (Typ.)
 Third Order Two Tone Intercept Point. +43 dBm (Typ.)

Specifications

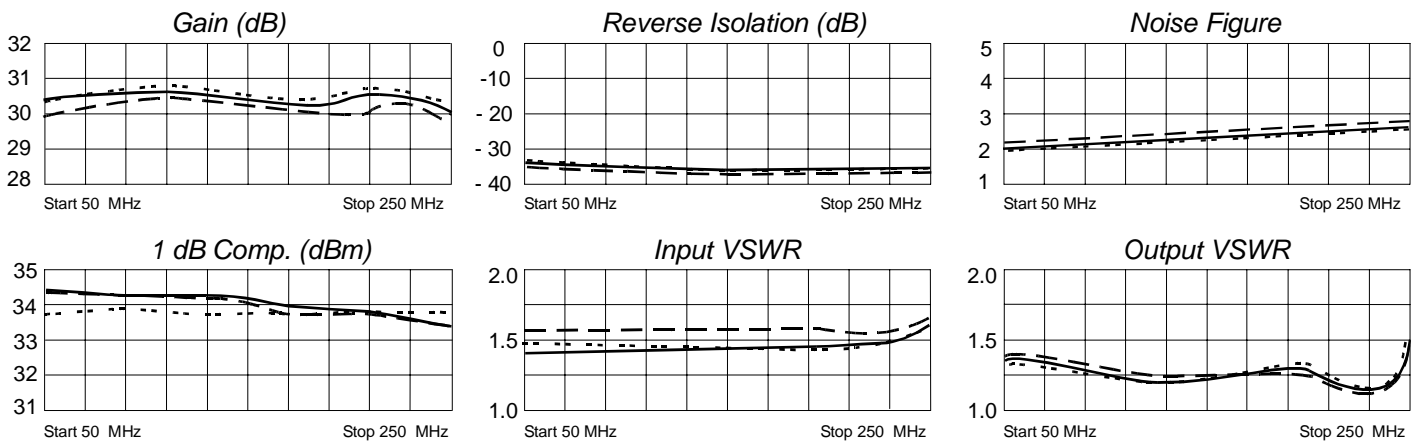
| CHARACTERISTIC | TYPICAL Ta= 25 °C | MIN/MAX Ta = 0 °C to +60 °C |
|-----------------------------|----------------------|--------------------------------|
| Frequency (MHz) | 50 - 250 MHz | 50 - 250 MHz |
| Gain (dB) | 31.0 | 29.0 Min. |
| Power @ 1 dB Comp. (dBm) | 33.5 | 33 Min. |
| Reverse Isolation (dB) | -38 | -35 Max. |
| VSWR In | 1.8:1 | 2:0:1 Max. |
| Out | 1.8:1 | 2:0:1 Max. |
| Noise figure (dB) | 3.5 | 4.5 Max. |
| Power Vdc | +15 | +15 |
| mA | 660 | 700 Max. |

Maximum (No Damage) Ratings

Ambient Operating Temperature -30°C to + 85 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 150 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 18 dBm
 Short Term RF Input Power ... 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.2 Watt (3 μsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data



Legend ——— + 25 °C - - - - + 60°C ······ 0 °C

Linear S-Parameters

| Freq. MHz | ---S11--- | | ---S21--- | | ---S12--- | | ---S22--- | |
|--------------|-----------|------|-----------|------|-----------|-----|-----------|------|
| | Mag | Deg | Mag | Deg | Mag | Deg | Mag | Deg |
| 50 | .21 | 30 | 31.97 | -43 | .0098 | 147 | .13 | 129 |
| 70 | .20 | -38 | 31.53 | -65 | .0092 | 134 | .09 | 116 |
| 90 | .20 | -47 | 31.30 | -85 | .0094 | 113 | .04 | 94 |
| 110 | .20 | -58 | 31.19 | -106 | .0100 | 92 | .02 | -51 |
| 130 | .19 | -68 | 30.95 | -216 | .0095 | 81 | .07 | -91 |
| 150 | .18 | -77 | 30.85 | -147 | .0097 | 59 | .12 | -109 |
| 170 | .17 | -85 | 30.80 | -167 | .0097 | 40 | .16 | -125 |
| 190 | .16 | -90 | 30.84 | 173 | .0108 | 36 | .19 | -142 |
| 210 | .16 | -94 | 31.07 | 153 | .0100 | 4 | .20 | -160 |
| 230 | .18 | -98 | 31.39 | 132 | .0113 | -4 | .20 | 179 |
| 250 | .21 | -106 | 31.94 | 110 | .0105 | -28 | .17 | 152 |



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/06/06

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001