

RF AMPLIFIER

Medium Power Amplifier

MODEL *BXMP1010*

Available as: WNMP1010: 10 Pin .625" Sq. Surface Mount (SG4)
 BXMP1010: SMA Connectorized Housing
www.DataSheet4U.com

Features

- High IP2: +69 dBm Typical
- Gain: +18 dB Typical
- Operating Temp. 0 °C to +65 °C
- Units are Unconditionally Stable

Typical Intermodulation Performance at 25 °C

- Second Order Harmonic Intercept Point +74 dBm (Typ.)
- Second Order Two Tone Intercept Point +69 dBm (Typ.)
- Third Order Two Tone Intercept Point +35 dBm (Typ.)

Specifications

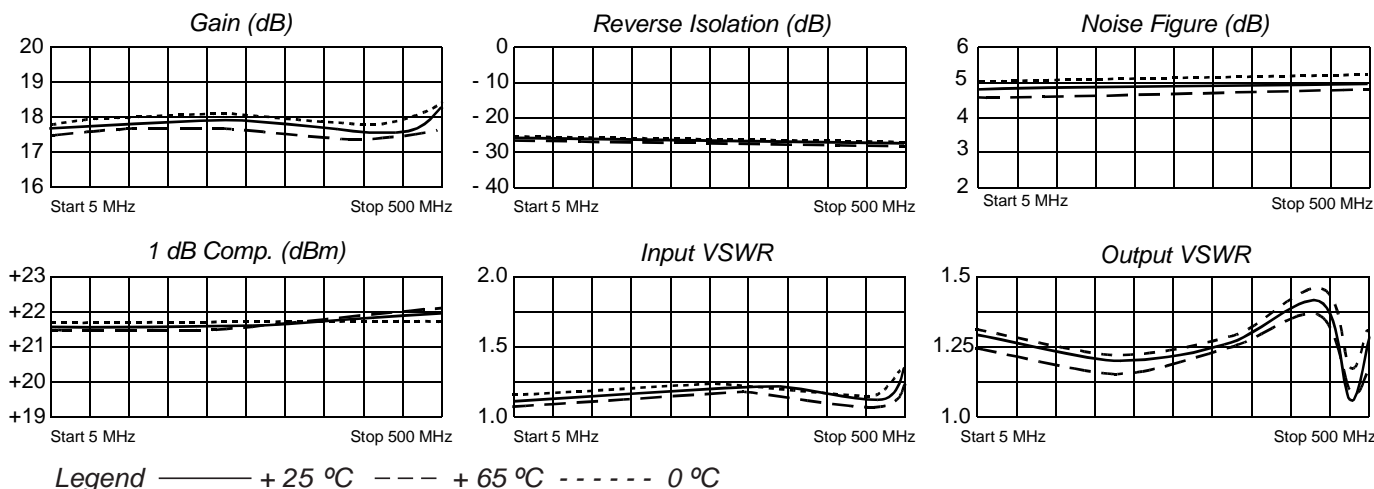
| CHARACTERISTIC | TYPICAL Ta= 25 °C | MIN/MAX Ta = 0 °C to +65 °C |
|-----------------------------|----------------------|--------------------------------|
| Frequency | 5 - 500 MHz | 5 - 500 MHz |
| Gain (dB) | 18 | 16.5 Min. |
| Power @ 1 dB Comp. (dBm) | +21.5 | +19.0 Min. |
| Reverse Isolation (dB) | -27 | -25 Max. |
| VSWR In | <1.3:1 | 2.0:1 Max. |
| Out | <1.3:1 | 2.0:1 Max. |
| Noise Figure (dB) | 4.5 | 6.0 Max. |
| Power Vdc | +15 | +15 |
| mA | 160 | 175 Max. |

Maximum (No Damage) Ratings

- Ambient Operating Temperature -55°C to + 100 °C
- Storage Temperature -62°C to + 125 °C
- Case Temperature + 125 °C
- DC Voltage + 18 Volts
- Continuous RF Input Power + 13 dBm
- Short Term RF Input Power 50 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



Linear S-Parameters

| Freq. MHz | ---S11--- | | ---S21--- | | ---S12--- | | ---S22--- | |
|--------------|-----------|-----|-----------|------|-----------|------|-----------|------|
| | Mag | Deg | Mag | Deg | Mag | Deg | Mag | Deg |
| 5 | .09 | 147 | 8.05 | -168 | .0423 | 13 | .13 | 128 |
| 50 | .12 | 159 | 8.21 | 155 | .0432 | -13 | .08 | 77 |
| 100 | .11 | 131 | 8.02 | 128 | .0433 | -29 | .10 | 45 |
| 200 | .06 | 80 | 7.78 | 77 | .0418 | -59 | .15 | -4 |
| 300 | .01 | 75 | 7.69 | 25 | .0383 | -91 | .16 | -54 |
| 400 | .04 | 95 | 7.91 | -29 | .0343 | -122 | .13 | -118 |
| 500 | .13 | -11 | 7.83 | -93 | .0308 | -150 | .13 | 138 |



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 3/25/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001
www.DataSheet4U.com