

# RF AMPLIFIER

## MODEL BXMP1008PM

# Medium Power Amplifier

Available as: BXMP1008PM, SMA Connectorized Housing

### Features

- Superior Phase Noise Performance
- High Power Output: Greater than 2 Watts
- High Third Order Intercept: +43 dBm Typical
- High IP2: +63 dBm Typical

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +60 °C
Frequency	50 - 250 MHz	50 - 250 MHz
Gain (dB)	17	16 Min.
Power @ 1 dB Comp. (dBm)	+33.5	+33 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	1.8:1	2.0:1 Max.
VSWR Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	5.6	6.0 Max.
Power Vdc	+15	+15
mA	600	630 Max.

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

Revision 4/25/2012

### 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.)

### Maximum (No Damage) Ratings

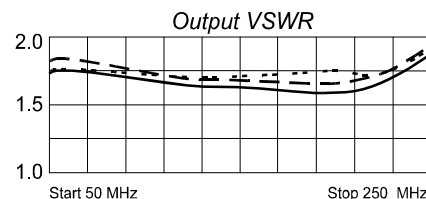
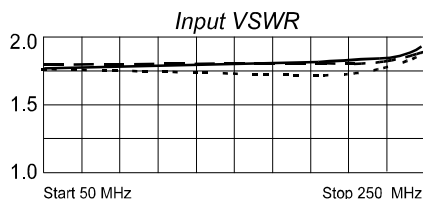
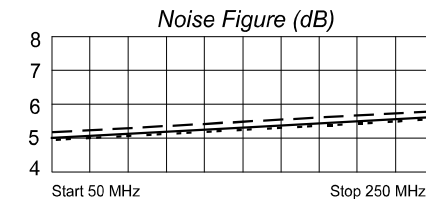
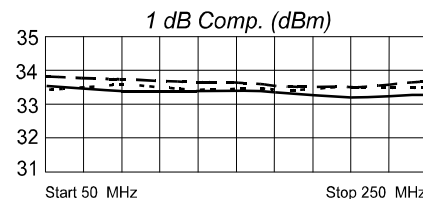
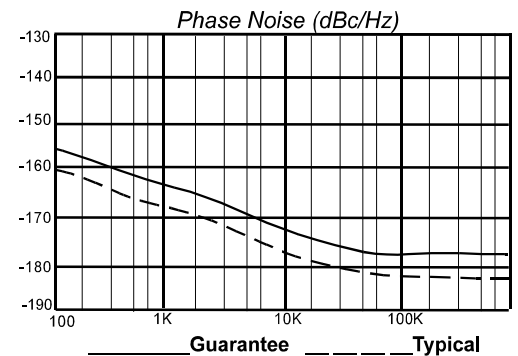
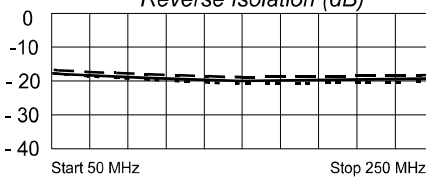
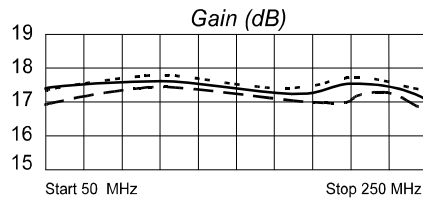
Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +150 °C  
 DC Voltage ..... +18 Volts  
 Continuous RF Input Power ..... +18 dBm  
 Short Term RF Input Power .... 200 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

### Guaranteed Phase Noise Performance (dBc/Hz)

Frequency	Typical	Guarantee (Min.)
100 Hz	-160	-155
1 kHz	-167	-162
10 kHz	-177	-172
100 kHz	-182	-177
1 MHz	-182	-177

Phase Noise Performance is measured and guaranteed at 160 MHz at 25C.

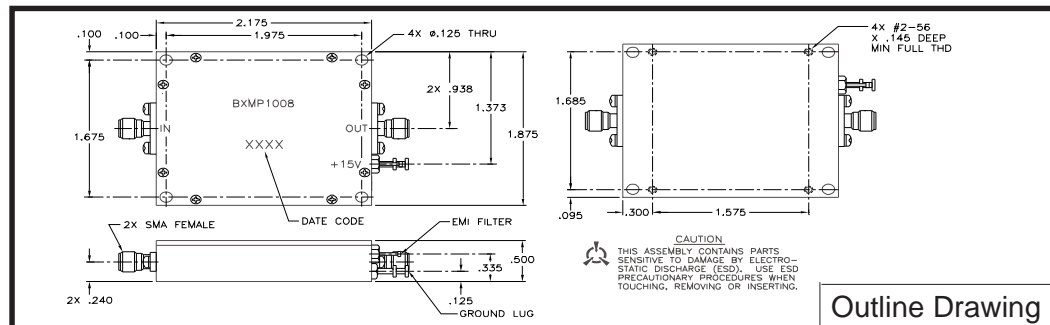
### Typical Performance Data



### Phase Noise Test Conditions:

Carrier Frequency: 160 MHz  
 Power Output: +33 dBm  
 Temperature: 25 °C  
 Agilent ES5500 System

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



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