

# RF AMPLIFIER

## MODEL **BXMP1000**

# Medium Power Amplifier

Available as: FPMP1000, 4 Pin .5" Sq. Flatpack  
 WPMP1000, 8 Pin .5" Sq. Gullwing  
 BXMP1000, Connectorized Housing (H106)

### Features

- Wideband Frequency: 100 - 1000 MHz
- High Output Power: +30 dBm Typical
- Operating Temp. 0 °C to + 70 °C

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +60 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +55 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +43 dBm (Typ.)

### Specifications

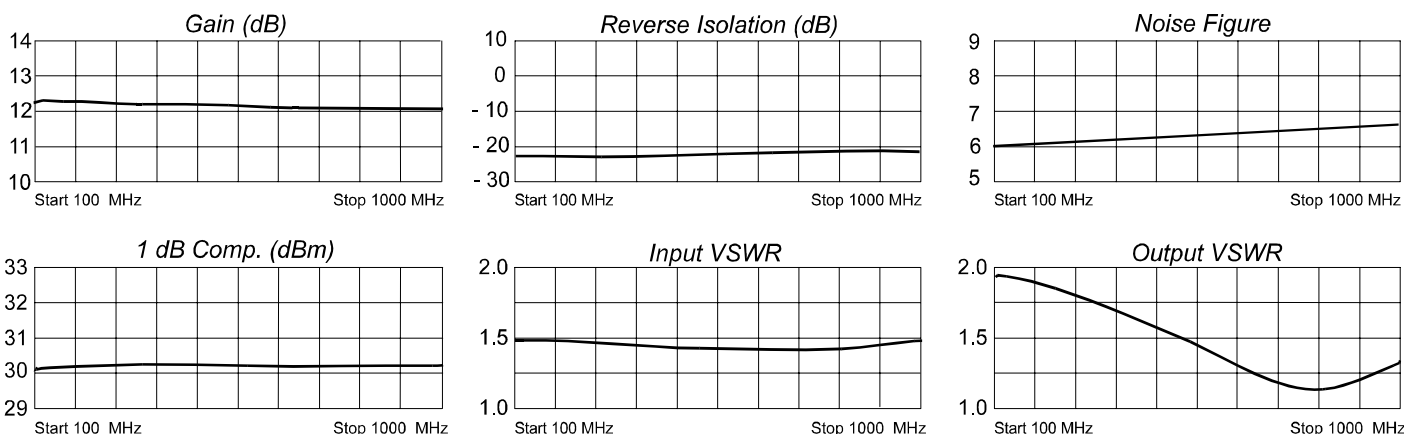
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +70 °C
Frequency	100 - 1000 MHz	100 - 1000 MHz
Gain (dB)	12	10.5 Min.
Power @ 1 dB Comp. (dBm)	30	29 Min.
Reverse Isolation (dB)	-23	-18 Max.
VSWR In	1.5:1	2:0:1 Max.
VSWR Out	1.5:1	2:0:1 Max.
Noise Figure (dB)	7	11 Max.
Power Vdc	+15	+15
Power mA	350	375 Max.

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

### Maximum 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 .... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 μsec Max.)

### Typical Performance Data



### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
100	.35	175	3.23	169.6	.069	4.31	.367	168.6
200	.33	164	3.24	157.7	.075	5.40	.346	155.9
300	.31	152	3.31	145.4	.083	4.78	.322	141.6
400	.28	138	3.45	131.5	.093	2.98	.293	124.3
500	.25	119	3.63	115.2	.106	-0.40	.259	100.9
600	.21	90	3.72	99.6	.119	-8.57	.216	69.9
700	.18	46	3.69	81.9	.128	-19.04	.189	26.0
800	.20	-3	3.48	63.1	.131	-30.54	.208	-23.0
900	.25	-42	3.11	44.7	.126	-41.18	.261	-61.6
1000	.31	-70	2.66	27.6	.116	-49.30	.318	-89.1

