

# RF AMPLIFIER

# Medium Power Amplifier

## MODEL **BXMP1030**

Available as: WNMP1030, 10 Pin .625" Sq. Surface Mount (SG4)  
 BXMP1030, SMA Connectorized Housing

### Features

- Ultra High Second Order Intercept: +70 dBm Typical
- High Output Power: +28 dBm Typical
- Environmental Screening Available

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +73 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +70 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +43 dBm (Typ.)

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +50 °C
Frequency	1 - 200 MHz	1 - 200 MHz
Gain (dB)	16	15 Min.
Power @ 1 dB Comp. (dBm)	28	26 Min.
Reverse Isolation (dB)	-22	-20 Max.
VSWR In	1.8:1	2:0:1 Max.
Out	1.8:1	2:0:1 Max.
Noise figure (dB)	4	5.0 Max.
Power Vdc	+15	+15
mA	250	275 Max.

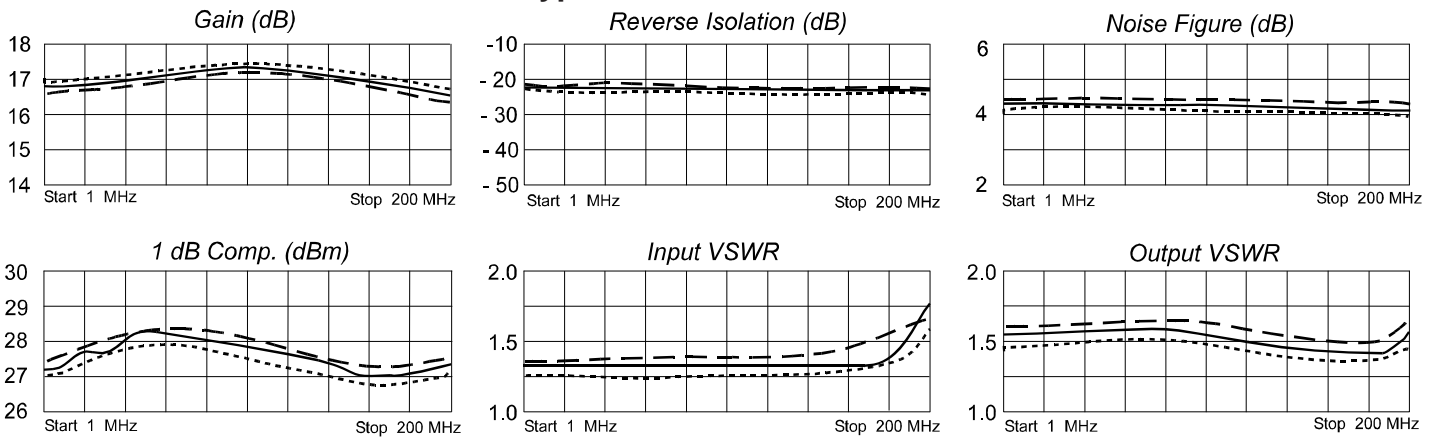
### Maximum Ratings

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

Revision 12/3/2012

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

### Typical Performance Data



Legend ——— +25 °C    - - - - +50 °C    ······ 0 °C

### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
1.00	.14	-163.23	6.86	10.14	.08	-168.39	.22	173.78
2.00	.16	-172.60	7.06	5.86	.08	-174.21	.24	178.52
3.00	.16	-176.56	7.21	3.09	.08	-176.89	.24	178.80
4.00	.16	-178.29	7.27	1.43	.08	-178.32	.24	178.42
5.00	.16	179.63	7.31	-0.16	.08	-179.75	.25	177.82
10.00	.16	173.03	7.34	-5.72	.08	175.69	.25	175.20
20.00	.16	162.99	7.30	-13.65	.08	169.44	.24	171.25
30.00	.16	152.55	7.23	-21.49	.08	163.05	.24	167.61
40.00	.16	144.44	7.17	-27.43	.08	158.20	.24	165.19
50.00	.16	134.13	7.12	-34.66	.08	152.38	.24	162.50
100.00	.15	83.89	6.98	-67.29	.08	126.56	.22	154.77
150.00	.19	24.82	6.85	-104.31	.07	97.09	.20	149.80
200.00	.26	-13.91	6.70	-133.46	.07	74.08	.23	148.64



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