

RF AMPLIFIER

Available as: BXMP1046, SMA Connectorized Housing

MODEL *BXMP1046*

Features

- Low Noise Figure: 2.0 dB Typical
- High IP3: +38 dBm Typical
- High Output Power: +24 dBm Typical
- Environmental Screening Available

Specifications

CHARACTERISTICS	TYPICAL Ta=25° C	MIN/MAX Ta=-40° C to +85° C
Frequency	500 - 2700 MHz	500 - 2700 MHz
Gain (dB)	28.0	25.75 / 28
Power @ 1 dB Comp. (dBm)	+25	+24.5 Min.
Reverse Isolation (dB)	-47	-42 Max.
VSWR In	1.6:1	1.7:1 Max.
Out	1.6:1	1.7:1 Max.
Noise Figure (dB)	2.0	2.5 Max.
Power Vdc	+12	+12
mA	300	330 Max.

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

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +59 dBm (Typ.)

Second Order Two Tone Intercept Point +54 dBm (Typ.)

Third Order Two Tone Intercept Point +38 dBm (Typ.)

Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature -55°C to +100 °C

Storage Temperature -62°C to +125 °C

Case Temperature +150 °C

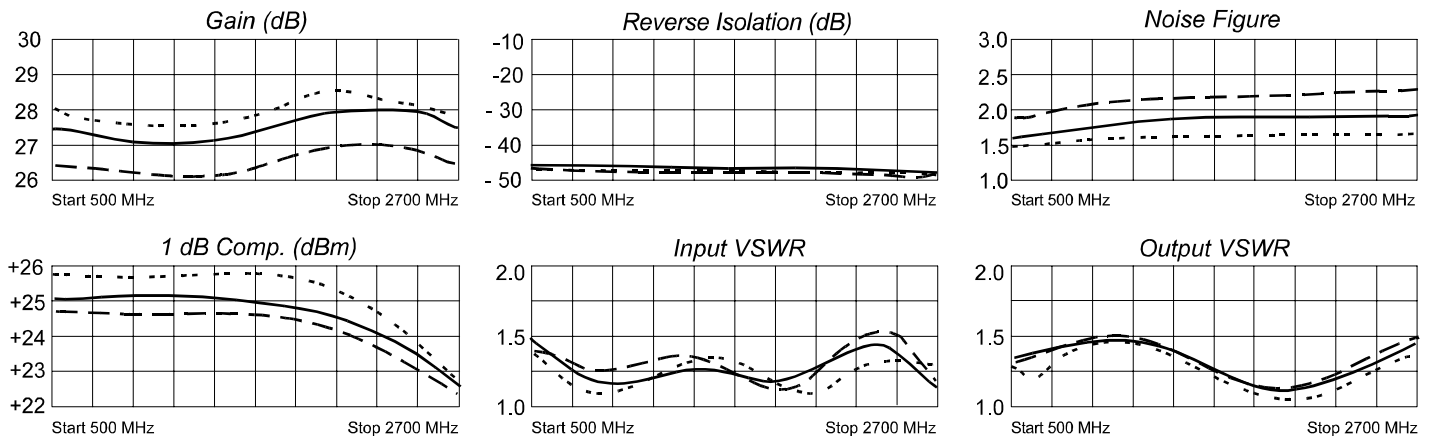
DC Voltage +14 Volts

Continuous RF Input Power +27 dBm

Short Term RF Input Power 1 Watt (1 Minute Max.)

Maximum Peak Power 2 Watts (3 µsec Max.)

Typical Performance Data



Legend ——— +25 °C --- +85 °C -40 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
500	0.12	80.72	20.14	-116.64	0.01	- 76.07	0.04	- 16.56
750	0.15	- 8.94	20.29	177.96	0.01	-125.72	0.07	- 78.13
1000	0.15	- 86.72	19.14	107.16	0.01	-179.08	0.12	-133.72
1250	0.13	-166.74	18.09	37.91	0.01	127.00	0.16	177.19
1500	0.11	109.99	17.96	- 23.17	0.01	79.30	0.18	136.83
1750	0.14	19.71	18.83	- 92.93	0.01	23.10	0.18	95.12
2000	0.16	- 48.22	20.44	-165.11	0.01	- 36.68	0.16	55.32
2250	0.16	- 93.23	21.71	127.96	0.01	- 86.39	0.13	15.21
2500	0.12	-119.61	21.11	49.23	0.00	-144.50	0.08	- 61.61
2700	0.13	-106.03	18.40	- 14.03	0.00	169.29	0.11	-155.11



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