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 ºC to + 70 ºC

Typical Intermodulation Performance at 25 º 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

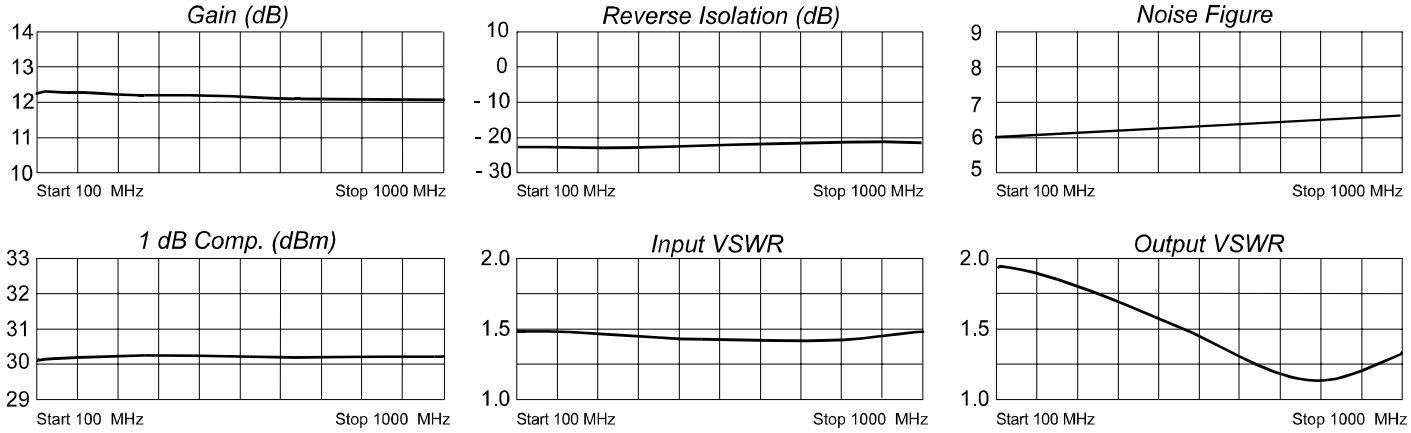
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +70 ºC
Frequency	100 - 1000 MHz	100 - 1000 MHz
Gain (dB)	12	10.5 Min.
Power @ 1 dB Comp. (dBm)	30	29 Min.
Reverse Isolation (dB)	-23	-18 Max.
VSWR In Out	1.5:1 1.5:1	2:0:1 Max. 2:0:1 Max.
Noise Figure (dB)	7	11 Max.
Power Vdc mA	+15 350	+15 375 Max.

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to +100 ºC
Storage Temperature ..... -62ºC to +125 ºC
Case Temperature ..... +125 ºC
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



Legend ——— + 25 ºC

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- 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

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