RF AMPLIFIER MODEL *BXMP1010*

Medium Power Amplifier

Available as: WNMP1010:10 Pin .625" Sq. Surface Mount (SG4)
BXMP1010: SMA Connectorized Housing

Features

- High IP2: +69 dBm Typical
- Gain: +18 dB Typical
- Operating Temp. 0 ºC to +65 ºC
- Units are Unconditionally Stable

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +65 ºC
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	18	16.5 Min.
Power @ 1 dB Comp. (dBm)	+21.5	+19.0 Min.
Reverse Isolation (dB)	-27	-25 Max.
VSWR In Out	<1.3:1 <1.3:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	4.5	6.0 Max.
Power Vdc mA	+15 160	+15 175 Max.

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

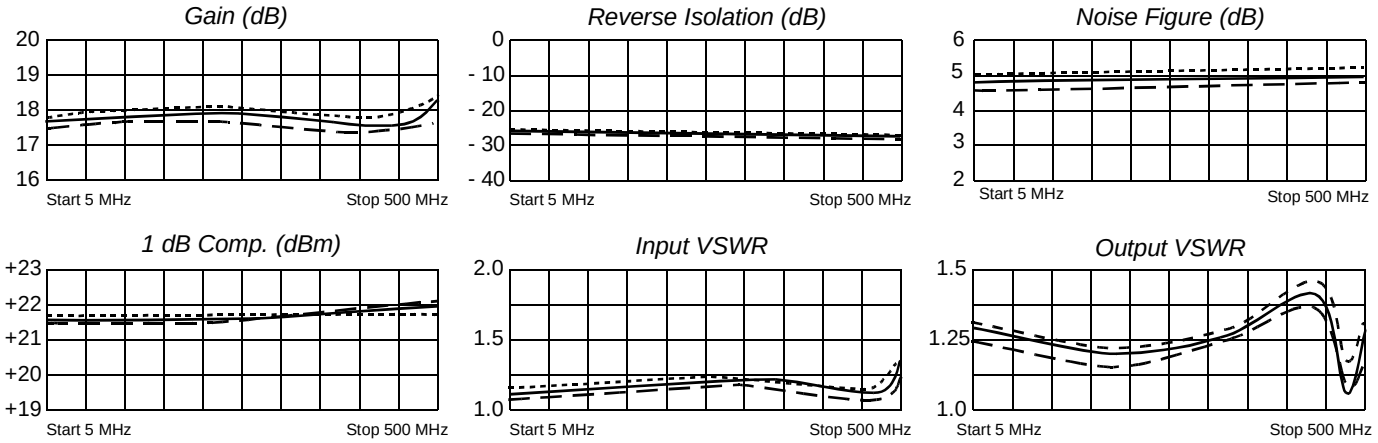
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point ..... +74 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +69 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +35 dBm (Typ.)

Maximum (No Damage) 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 ..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— *+ 25 ºC* – – – *+ 65 ºC* - - - - - - *0 ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- Mag	Deg
5	.09	147	8.05	-168	.0423	13	.13	128
50	.12	159	8.21	155	.0432	-13	.08	77
100	.11	131	8.02	128	.0433	-29	.10	45
200	.06	80	7.78	77	.0418	-59	.15	-4
300	.01	75	7.69	25	.0383	-91	.16	-54
400	.04	95	7.91	-29	.0343	-122	.13	-118
500	.13	-11	7.83	-93	.0308	-150	.13	138

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