

RF AMPLIFIER

Medium Power Amplifier

MODEL *BXMP1006*

Available as: BXMP1006, SMA Connectorized Housing (H-7)

WNMP1006, 10 Pin 0.625" Sq. Gullwing Surface Mount (SG4)

Features

- Ultra High IP2: +73 dBm Typical
- High IP3: +40 dBm Typical
- High Output Power: +28.5 dBm Typical

Typical Intermodulation Performance at 25 °C

- Second Order Harmonic Intercept Point +77 dBm (Typ.)
- Second Order Two Tone Intercept Point +73 dBm (Typ.)
- Third Order Two Tone Intercept Point +40 dBm (Typ.)

Specifications

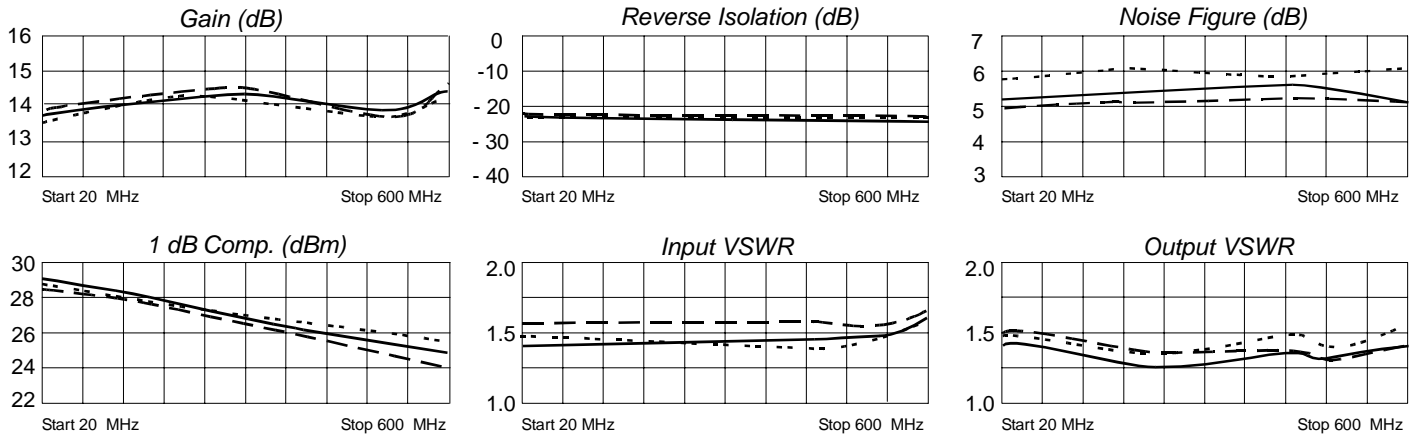
CHARACTERISTICS	TYPICAL	MIN/MAX
	Ta=25° C	Ta=-55° C to +85° C
Frequency	20 - 600 MHz	20 - 600 MHz
Gain (dB)	13.5	12 Min.
Power @ 1 dBComp. (dBm)		
20 - 250 MHz	28.5	26.0 Min.
250 - 600 MHz	26.0	23.5 Min.
Reverse Isolation (dB)	-22	-20 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	5.5	7.5 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 +150 °C
- DC Voltage +18 Volts
- Continuous RF Input Power +13 dBm
- Short Term RF Input Power ... 100 Milliwatts (1 Minute Max.)
- Maximum Peak Power 0.1 Watt (3 µsec Max.)

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

Typical Performance Data



Legend ——— +25 °C - - - - +85°C ······ -55 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
20	.02	34	5.30	-2	.0688	-179	.22	164
30	.03	28	5.42	-9	.0707	176	.21	165
40	.03	26	5.49	-16	.0705	171	.20	165
50	.03	23	5.50	-21	.0711	167	.20	165
60	.03	21	5.53	-27	.0714	163	.19	164
70	.04	16	5.55	-32	.0720	160	.19	163
80	.04	12	5.55	-38	.0718	156	.18	163
90	.05	7	5.55	-43	.0720	152	.18	162
100	.05	2	5.54	-48	.0716	149	.17	161
200	.12	-52	5.48	-100	.0708	114	.14	170
300	.19	-100	5.37	-151	.0665	79	.19	179
400	.21	-145	5.41	157	.0608	47	.27	157
500	.14	179	5.65	98	.0555	16	.30	113
600	.15	-115	5.38	27	.0509	-21	.24	25



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