RF AMPLIFIER MODEL *BXMP1006*

Medium Power Amplifier

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

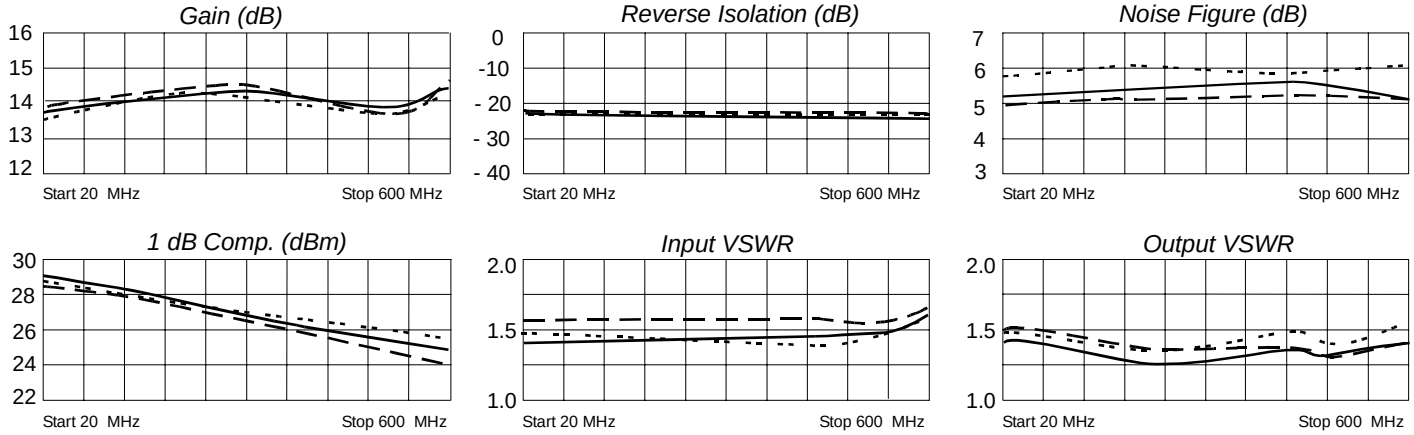
CHARACTERISTICS	TYPICAL Ta=25° C	MIN/MAX Ta=-55° C to +85° C
Frequency	20 - 600 MHz	20 - 600 MHz
Gain (dB)	13.5	12 Min.
Power @ 1 dBComp. (dBm)		
20 - 250 MHz	28.5	26.0 Min.
250 - 600 MHz	26.0	23.5 Min.
Reverse Isolation (dB)	-22	-20 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	5.5	7.5 Max.
Power Vdc	+15	+15
mA	250	275 Max.

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 .....+150 ºC
DC Voltage ..... +18 Volts
Continuous RF Input Power ..... +13 dBm
Short Term RF Input Power ... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.1 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— *+25 ºC* – – – *+85ºC* - - - - - *-55 ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- 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	-448	.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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