RF AMPLIFIER MODEL *BXMP1004*

Medium Power Amplifier

Available As: BXMP1004, Connectorized Housing

Features

- High Power Output: Greater Than 2 Watts
- Internal Regulator: Accepts +17 Volts to +24 Volts
- High Gain: 31 dB Typical

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +66 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +63 dBm (Typ.)
Third Order Two Tone Intercept Point. ..... +43 dBm (Typ.)

Specifications

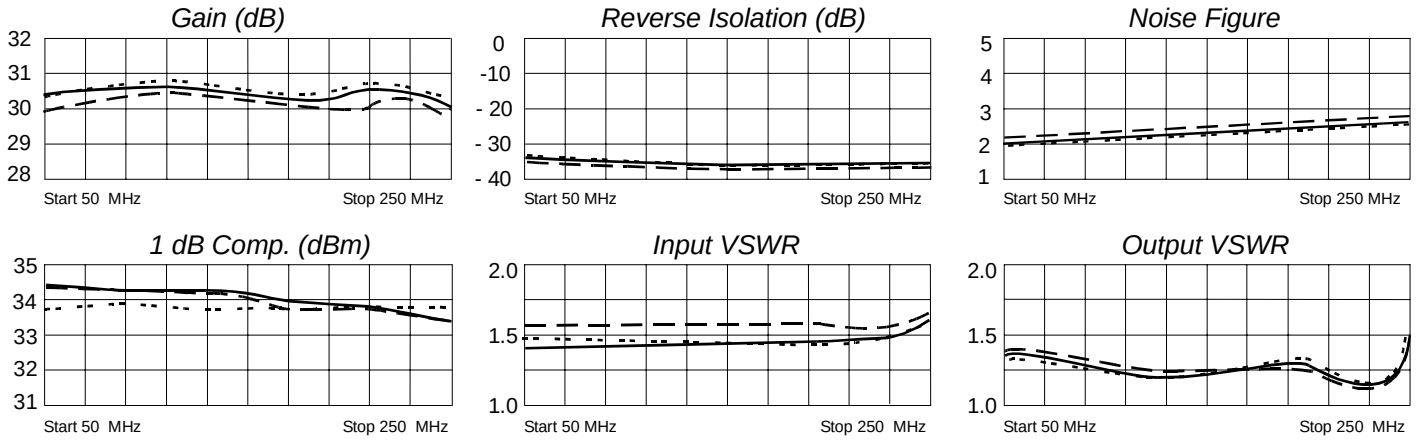
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +60 ºC
Frequency (MHz)	50 - 250 MHz	50 - 250 MHz
Gain (dB)	31.0	29.0 Min.
Power @ 1 dB Comp. (dBm)	33.5	33 Min.
Reverse Isolation (dB)	-38	-35 Max.
VSWR In	1.8:1	2:0:1 Max.
VSWR Out	1.8:1	2:0:1 Max.
Noise figure (dB)	3.5	4.5 Max.
Power Vdc	+17 to +24	+17 to +24
Power mA	660	700 Max.

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

Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -30ºC to + 85 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 150 ºC
DC Voltage ..... + 28 Volts
Continuous RF Input Power ..... + 18 dBm
Short Term RF Input Power ... 200 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— *+ 25 ºC* ——— *+ 60ºC* - - - - - - *0 ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- Mag	Deg
50	.21	30	31.97	-43	.0098	147	.13	129
70	.20	-38	31.53	-65	.0092	134	.09	116
90	.20	-47	31.30	-85	.0094	113	.04	94
110	.20	-58	31.19	-106	.0100	92	.02	-51
130	.19	-68	30.95	-216	.0095	81	.07	-91
150	.18	-77	30.85	-147	.0097	59	.12	-109
170	.17	-85	30.80	-167	.0097	40	.16	-125
190	.16	-90	30.84	173	.0108	36	.19	-142
210	.16	-94	31.07	153	.0100	4	.20	-160
230	.18	-98	31.39	132	.0113	-4	.20	179
250	.21	-106	31.94	110	.0105	-28	.17	152

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