

# RF AMPLIFIER

## MODEL BXMP1001

# Medium Power Amplifier

Package: SMA Connectorized Housing (H91)  
Optional BXMP1001LF (Lead Free Option)

### Features

- Low Noise Figure: 3.7 dB Typical
- High 3rd Order Intercept: >+49 dBm Typical
- High Power 1 dB Comp. +32 dBm Typical

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +95 dBm (Typ.)  
Second Order Two Tone Intercept Point..... +93 dBm (Typ.)  
Third Order Two Tone Intercept Point..... +49 dBm (Typ.)

### Specifications

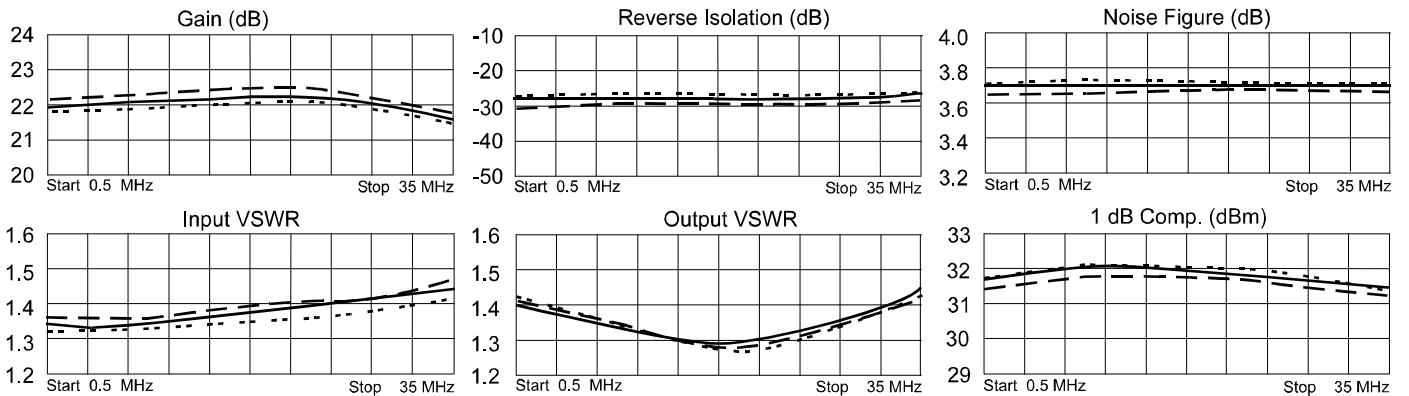
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +50 °C
Frequency	0.5 - 35 MHz	0.5 - 35 MHz
Gain (dB)	22	21.0 Min.
Gain Flatness (dB)	0.5	-
Power @ 1 dB Comp. (dBm)	+32	+31 Min.
IP2(dBm) 5-35 MHz	93	90 Min.
IP3 (dBm)	49	47 Min.
Reverse Isolation (dB)	-27	-26 Min.
VSWR In	<1.5:1	1.5:1 Max.
VSWR Out	<1.5:1	1.5:1 Max.
Noise figure (dB)	3.7	4.0 Max.
Power Vdc	+24	+24
mA	425	450 Max.

### Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
Storage Temperature ..... -62°C to +125 °C  
DC Voltage ..... +26 Volts  
Continuous RF Input Power ..... +13 dBm  
Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
Maximum Peak Power ..... 0.5 Watt (3 μsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.  
Revision 6/1/2012

### Typical Performance Data



Legend ——— +25 °C    - - - - - +50 °C    ······ 0 °C

### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
0.1	.65	102	9.04	-98	.0230	128	.60	51
0.3	.14	69	12.45	-155	.0474	39	.21	2
0.5	.08	65	12.49	-165	.0464	22	.16	-2
0.7	.05	61	12.47	-170	.0465	16	.15	-3
0.9	.04	58	12.49	-172	.0466	13	.15	-3
5	.02	-16	12.93	174	.0490	-3	.13	-6
15	.03	-133	12.85	156	.0489	19	.11	-11
25	.06	175	12.60	140	.0471	-32	.07	-9
35	.12	145	12.31	123	.0448	-43	.04	44



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## Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

## Outline Drawing

(For Reference Only)

