

# RF AMPLIFIER

## MODEL BXMP1001

# Medium Power Amplifier

Package: SMA Connectorized Housing (H91)

### 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.)

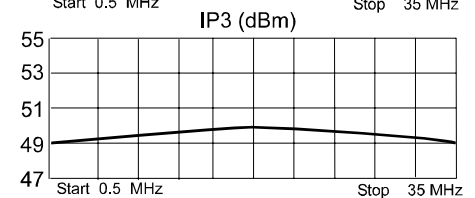
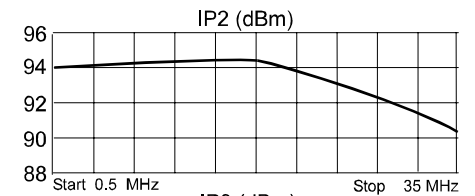
### Specifications

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	22.5 Max.
Gain Flatness (dB)	0.5	21.5 Min.
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.

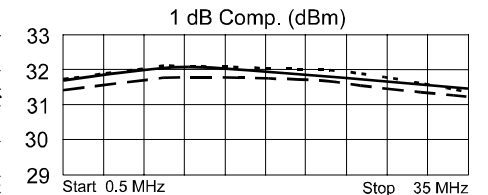
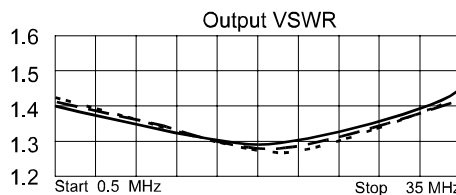
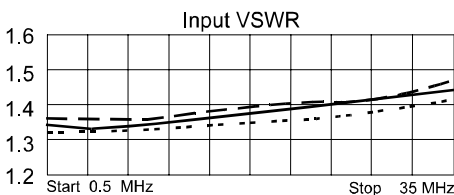
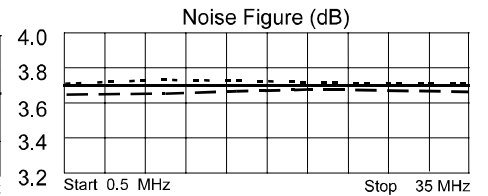
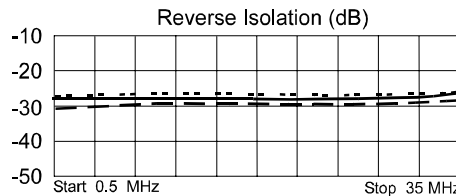
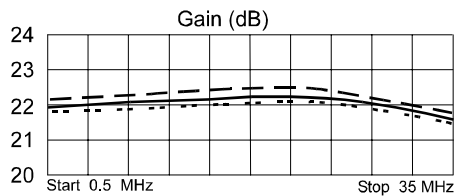
Note: Care should always be taken to effectively ground the case of each unit.

### Maximum 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 .... 100 Milliwatts (1 Minute Max.)
- Maximum Peak Power ..... 0.1 Watt (3 μsec Max.)



### 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

