

# RF AMPLIFIER

## MODEL BXMP1012

# Medium Power Amplifier

Package: SMA Connectorized Housing (H106)

### 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

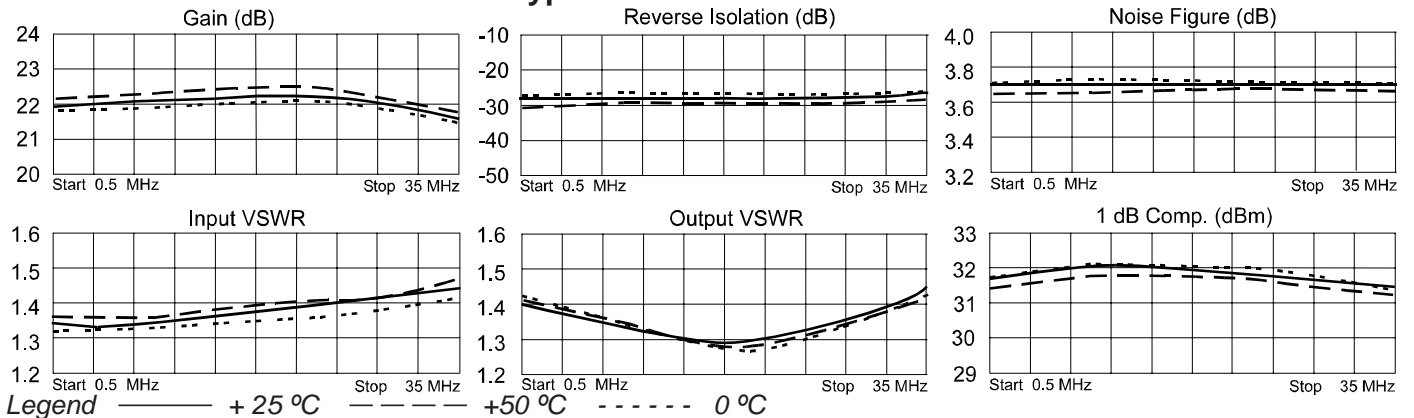
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +50 °C
Frequency	0.5 - 35 MHz	0.5 - 35 MHz
Gain (dB)	22	21.5 Min./ 22.5 Max.
Gain Flatness (dB)	0.5	0.5 Min.
Power @ 1 dB Comp. (dBm)	+32	+31 Min.
IP2(dBm) 5-35 MHz	93	90 Min.
IP3 (dBm)	49	47 Min.
Reverse Isolation (dB)	-27	-26 Min.
VSWR In	<1.5:1	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
Power mA	425	450 Max.

### 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.)

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

### Typical Performance Data



### Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
0.1	.59	108	11.17	-112	.0371	80	.60	51
0.2	.26	91	13.06	-148	.0447	39	.28	12
0.3	.16	90	13.13	-160	.0448	24	.21	2
0.4	.12	89	13.09	-165	.0449	18	.18	-1
0.5	.10	89	13.06	-169	.0446	13	.16	-2
0.6	.08	88	13.04	-171	.0445	11	.16	-3
0.7	.07	88	13.03	-172	.0448	10	.15	-3
0.8	.07	87	13.02	-173	.0449	8	.15	-3
0.9	.06	85	13.02	-174	.0448	7	.15	-3
1.0	.06	84	13.02	-175	.0450	7	.14	-3
5	.02	31	13.23	173	.0448	-5	.13	-6
10	.01	-3	13.12	165	.0542	-13	.12	-9
15	0	-65	12.98	157	.0447	-21	.11	-11
20	.01	155	12.89	149	.0435	-27	.09	-12
25	.03	146	12.77	141	.0434	-31	.07	-9
30	.06	139	12.64	134	.0437	-40	.05	8
35	.08	127	12.56	126	.0436	-48	.04	44

