

RF AMPLIFIER

MODEL *BXMP1007*

Medium Power Amplifier

Available as: BXMP1007, Connectorized Housing

Features

- High IP₂: +52 dBm Typical
- Excellent Reverse Isolation
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +58 dBm (Typ.)
 Second Order Two Tone Intercept Point +52 dBm (Typ.)
 Third Order Two Tone Intercept Point +33 dBm (Typ.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	2400 - 3600 MHz	2400 - 3600 MHz
Gain (dB)	19.5	19 Min.
Power @ 1 dB Comp. (dBm)	+22.5	+21 Min.
Reverse Isolation (dB)	-50	-48 Max.
VSWR In	1.6	2.0:1 Max.
Out	1.35	2.0:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15 Min.
mA	145	150 Max.

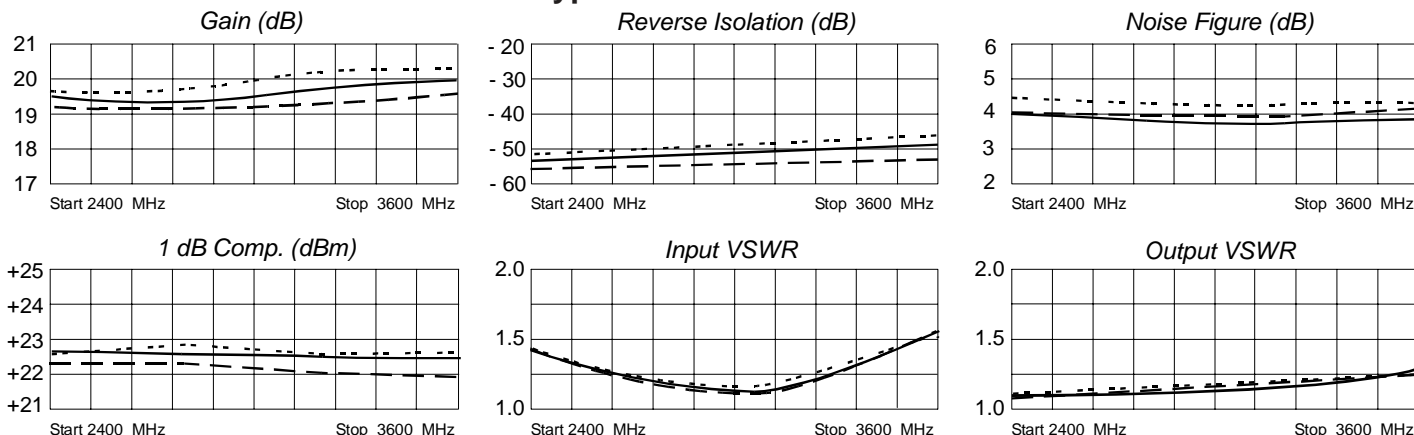
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power + 18 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.

Legend ——— + 25 °C - - - - + 85 °C - - - - -55 °C

Typical Performance Data



Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
2400	.18	-130	9.87	68	.0022	-84	.02	113
2500	.11	-148	9.93	28	.0014	-118	.01	68
2600	.04	-163	9.79	-11	.0024	-140	.01	44
2700	.01	-52	9.78	-49	.0023	180	.01	40
2800	.05	-45	9.61	-87	.0027	176	.01	38
2900	.06	-62	9.51	-124	.0021	154	.02	30
3000	.06	-83	9.59	-161	.0028	102	.02	24
3100	.03	-113	9.70	161	.0026	53	.03	21
3200	.02	152	9.71	123	.0017	30	.04	9
3300	.06	84	9.99	85	.0035	0	.05	6
3400	.11	59	10.10	46	.0026	-49	.06	2
3500	.17	39	10.23	6	.0023	-60	.08	-6
3600	.22	20	10.03	-36	.0028	-101	.10	-15



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 03/14/06

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001