

RF AMPLIFIER

MODEL *BXMP1019*

Medium Power Amplifier

Available as: TRMP1019, 4-Pin TO-8B (Tall)
WNMP1019, 10 Pin .625" Sq. Surface Mount (SG4)
BXMP1019, SMA Connectorized Housing

Features

- High IP2: +70 dBm Typical
- High Output Power: +28 dBm Typical
- High Third Order Intercept: +42 dBm Typical
- Operating Temp. - 55 °C to +85 °C

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +75 dBm (Typ.)
Second Order Two Tone Intercept Point +70 dBm (Typ.)
Third Order Two Tone Intercept Point +42 dBm (Typ.)

Specifications

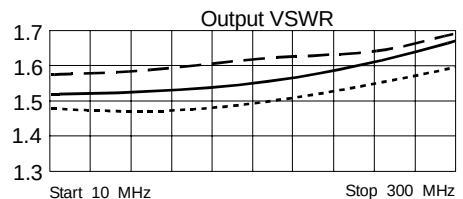
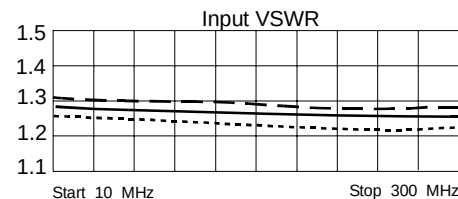
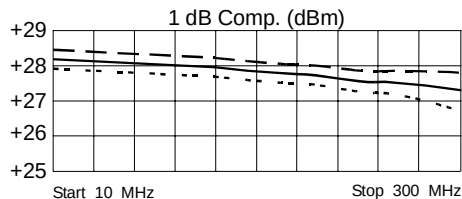
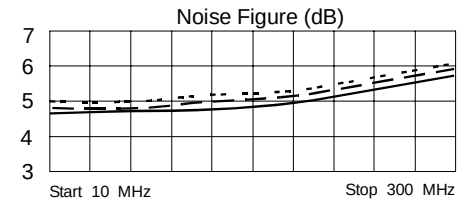
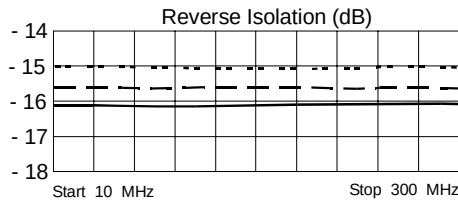
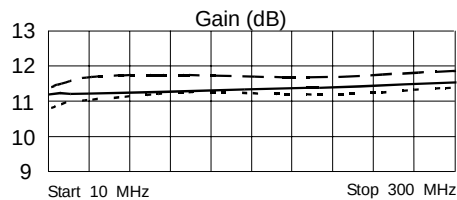
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 300 MHz	10 - 250 MHz
Gain (dB)	10.8	9.5 Min.
Power @ 1 dB Comp. (dBm)	+28.0	+26.5 Min.
Reverse Isolation (dB)	-16	-15 Max.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise figure (dB)	5.0	6.3 Max.
Power Vdc	+15	+15
mA	235	265 Max.

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

Maximum (No Damage) Ratings

Ambient Operating Temperature -55°C to + 100 °C
Storage Temperature -62°C to + 125 °C
Case Temperature + 125 °C
DC Voltage + 17 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 °C --- + 85 °C -55 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	0.119	-178.0	3.61	175.0	0.1550	-1.0	0.205	173.0
50	0.121	-174.0	3.63	173.0	0.1560	-2.0	0.205	165.0
100	0.121	-169.0	3.64	170.0	0.1560	-3.0	0.209	156.0
140	0.119	-165.0	3.67	166.0	0.1560	-5.0	0.214	148.0
180	0.115	-159.0	3.71	162.0	0.1560	-6.0	0.220	139.0
220	0.112	-151.0	3.76	158.0	0.1560	-8.0	0.230	129.0
260	0.111	-143.0	3.79	155.0	0.1570	-9.0	0.240	122.0
300	0.114	-134.0	3.83	151.0	0.1580	-10.0	0.255	115.0



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

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