

# RF AMPLIFIER

## MODEL QB-300-01

Available as: QB-300-01, Outline Drawing with BNC Connectors (080-22518)

### Features

- High Gain: 23 dB Typical
- High Power: +22 dBm Typical
- Operating Temp. -54 °C to +71 °C
- Environmental Screening Available

### Specifications

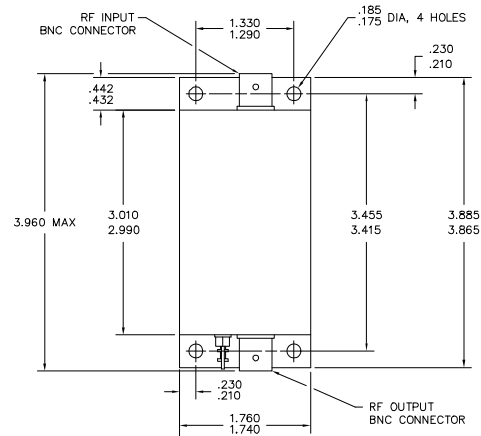
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -54 °C to +71 °C
Frequency	1 - 300 MHz	1 - 300 MHz
Gain (dB)	23 ± 1.0	—
Gain vs. Temperature	—	+0.5/ -0.6 Max.
Gain Flatness	1.0	—
Reverse Isolation (dB)	-36	—
VSWR In	1.5:1	—
Out	1.5:1	—
1 dB Compression (dBm)	+22	—
Output Intercept point		
3rd Order	+37	—
2nd Order	+52	—
Noise Figure (dB)	3.8	—
Power Vdc	+20	+20 (Max)
mA	154	

Note: Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

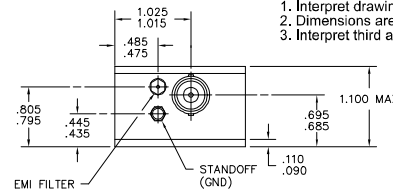
Revision 3-16-2015

### Maximum (NO DAMAGE) Ratings

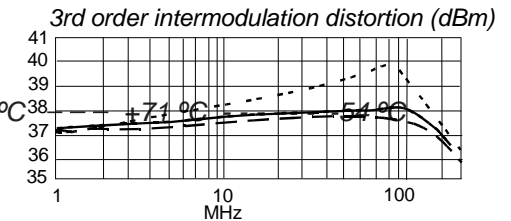
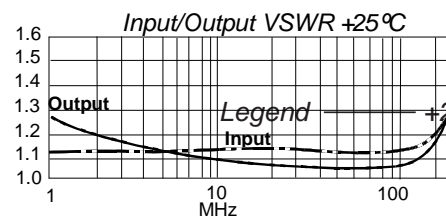
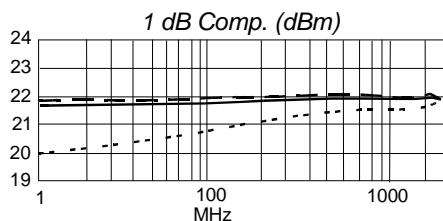
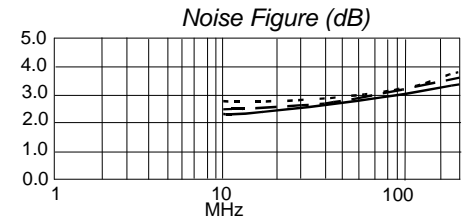
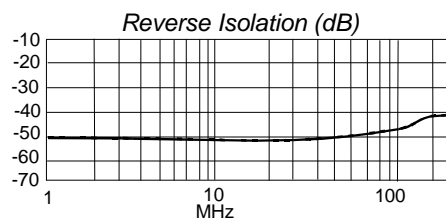
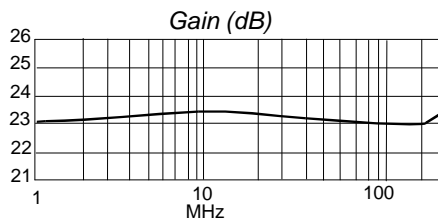
Ambient Operating Temperature ..... -54°C to +71 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +21 Volts  
 Continuous RF Input Power ..... +13 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)



Notes: Unless otherwise specified:  
 1. Interpret drawing IAW MIL-STD-100.  
 2. Dimensions are in inches.  
 3. Interpret third angle projection



### Typical Performance Data



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

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