

RF AMPLIFIER

MODEL QBH-2001

Available as: QBH-2001, 0.500" Sq. SM (E52-Gen2SMT)

Features

- Lower Cost Package
- High Dynamic Range LNA
- Noise Figure 1.0 dB Typical
- 3rd Order Intercept Point +33 dBm Typical
- No External Components Required

Specifications

CHARACTERISTIC	TYPICAL Ta= +25 °C	MIN/ MAX Ta= +25 °C
Frequency	1600 -3000 MHz	1800 - 2200 MHz
Gain (dB)	14	13 Min.
Gain Flatness	+/-0.4 Max.	+/-0.4 Max.
Reverse Isolation (dB)	20	—
VSWR In	1.5:1	—
VSWR Out	1.5:1	—
1 dB Compression (dBm)	18	+17 Min.
Output Intercept Point 3rd Order	+33	+32 Min.
Noise Figure (dB)	1.0	—
Power Vdc	5	5
mA	66	70

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

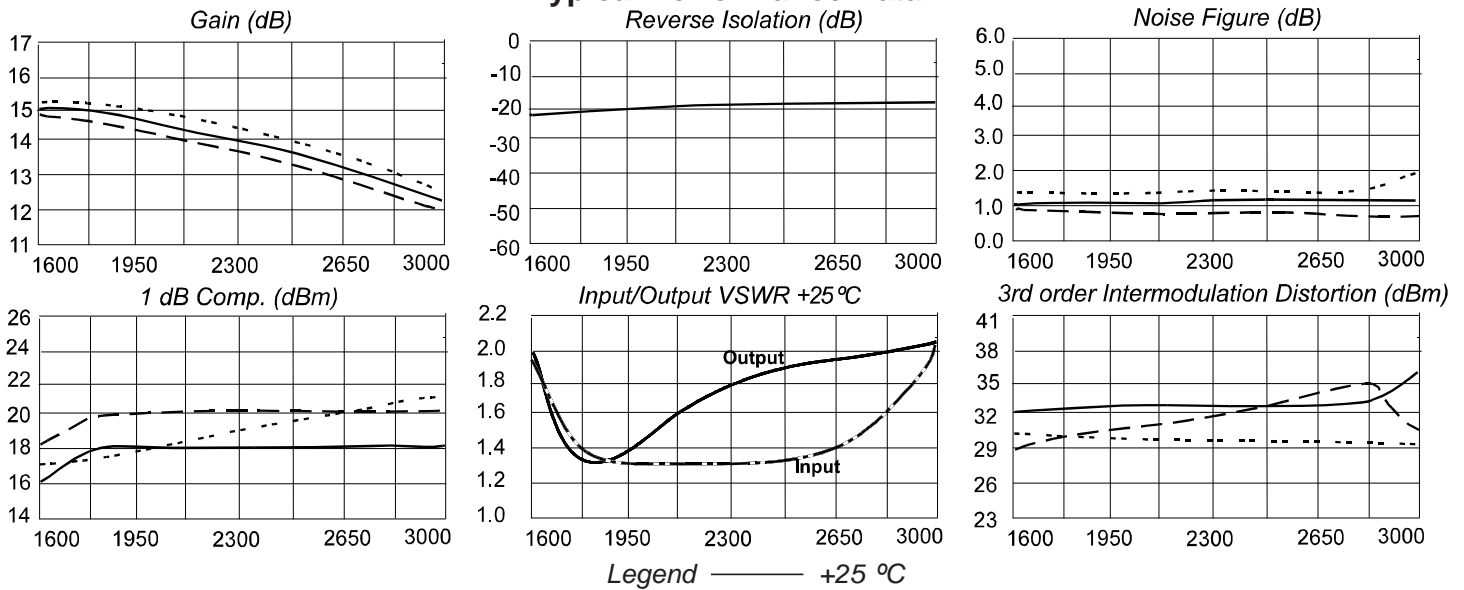
Maximum (No Damage) Ratings

Ambient Operating Temperature -40°C to +85 °C
 Storage Temperature -65°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +6 Volts
 Continuous RF Input Power +10 dBm
 Short Term RF Input Power 20 Milliwatts (1 Minute Max.)
 Maximum Peak Power 50 Milliwatts (3 μsec Max.)

Revision 8/30/2013



Typical Performance Data



Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
1800	-14.7 -14.1	15.1 -43.7	-21.3 -101.8	-16.4 111.9
1870	-16.3 -22.3	15.0 -58.5	-21.0 -113.6	-18.4 110.3
1890	-16.7 -24.3	15.0 -62.7	-21.0 -116.9	-18.7 110.6
1900	-16.9 -25.0	15.0 -64.8	-20.9 -118.7	-18.8 110.8
1950	-17.7 -27.5	14.9 -75.3	-20.7 -126.9	-18.6 112.4
2000	-18.4 -23.7	14.8 -85.6	-20.6 -135.2	-17.6 114.5
2100	-19.3 21.5	14.5 -105.9	-20.3 -151.3	-15.4 117.7
2150	-19.0 43.3	14.4 -115.9	-20.1 -159.3	-14.5 117.1
2200	-18.6 50.8	14.3 -125.9	-20.0 -167.0	-13.7 115.3



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