

RF AMPLIFIER

MODEL QBH-4013

Available as: QBH-4013, 4 Pin TO-8 (080-10114-0001)
QBH-9-4013, Connectorized Housing (ES E52-1501)

Features

- Wide Bandwidth 30-3000 MHz
- High Gain: 19.0 dB Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	30 - 3000 MHz	—
Gain (dB)	19.0 ±1.0	—
Gain vs. Temperature	—	—
Gain Flatness	1.0	—
Reverse Isolation (dB)	-30	—
VSWR In	2.0:1	—
Out	2.0:1	—
1 dB Compression (dBm)	+15.0	—
Output Intercept point		—
3rd Order	+25	—
2nd Order	+38	—
Noise Figure (dB)	4.0	—
Power Vdc	+15	—
mA	90	—

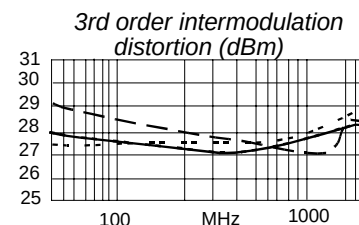
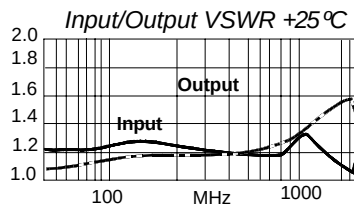
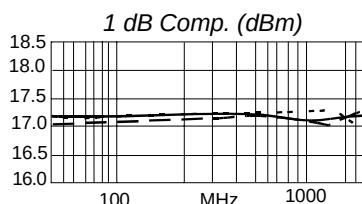
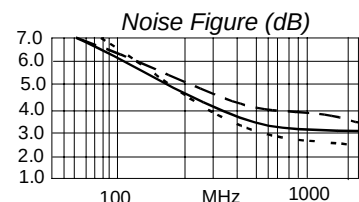
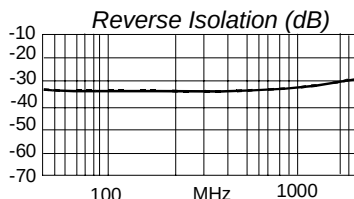
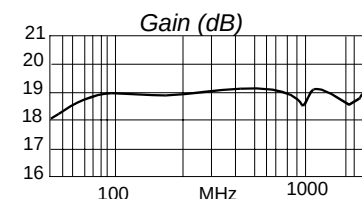
Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
Storage Temperature -65°C to + 150 °C
Case Temperature +125 °C
DC Voltage +15 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.)

Note:

1. Specifications are guaranteed when tested in a 50 Ohm system.
Specifications indicated as typical are not guaranteed.
2. Noise Figures increase below 500 MHz

Typical Performance Data



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

Linear S-Parameters Data

FREQ. MHz	-- S11 -- dB Ang	-- S21 -- dB Ang	-- S12 -- dB Ang	-- S22 -- dB Ang
30	-28.6 18.3	18.1 14.4	-34.6 -4.4	-21.0 -120.4
100	-23.1 11.0	19.1 -12.7	-35.5 -10.2	-19.1 -168.0
160	-21.6 -3.1	18.9 -25.7	-35.2 -17.1	-19.0 174.7
250	-22.5 -17.2	19.1 -42.5	-35.5 -26.3	-19.7 157.5
800	-18.8 -45.4	18.7 -148.3	-35.1 -78.1	-21.6 106.4
1400	-15.1 -104.0	19.1 104.8	-34.4 -145.6	-18.5 42.3
1900	-13.6 -150.1	18.7 10.4	-33.4 156.2	-23.0 -7.1
2500	-13.2 137.8	18.5 -98.6	-32.0 76.0	-33.4 -88.5
3000	-14.7 65.4	19.0 162.9	-30.5 11.3	-22.4 71.1



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 03/11/05

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