

RF Amplifier

High Gain: 14.4 dB

Model QBH-8114

10 to 400 MHz

Features

- High Gain: 14.4 dB Typical
- High Power: +7 dBm Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 400 MHz	—
Gain (dB)	14.4 ±0.6	—
Gain vs. Temperature	—	—
Gain Flatness	0.6	—
Reverse Isolation (dB)	-24	—
VSWR In	1.5:1	—
Out	1.6:1	—
1 dB Compression (dBm)	+7	—
Output Intercept point		
3rd Order	+20	—
2nd Order	+30	—
Noise Figure (dB)	3.0	—
Power Vdc	+5	—
mA	25	—

Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 12 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:

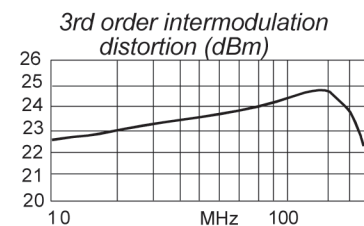
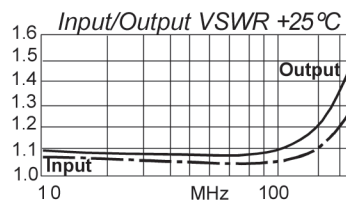
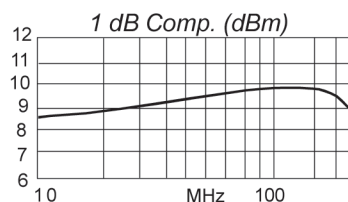
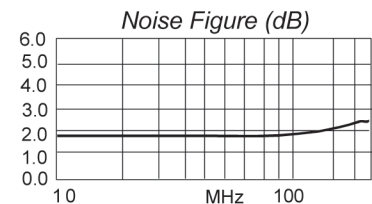
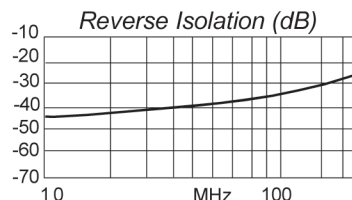
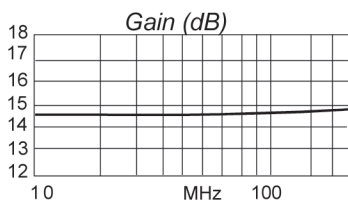
- Specifications are guaranteed when tested in a 50 Ohm system.
 Specifications indicated as typical are not guaranteed.

Packaging Options (see Appendix)

QBH-8114, Hybrid SM (E52-19422)

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

Typical Performance Data



Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
10	-30.5 145.9	14.6 -178.0	-44.0 33.5	-27.3 87.5
100	-36.2 -2.5	14.6 154.3	-35.7 52.3	-28.3 -92.1
150	-31.6 -45.8	14.6 141.3	-32.8 48.2	-24.4 -102.5
200	-27.8 -73.6	14.7 128.4	-30.5 44.2	-21.6 -110.9
300	-22.2 -119.4	14.7 102.1	-27.2 32.5	-17.4 -129.3
400	-17.6 -154.8	14.8 74.7	-24.9 17.4	-14.3 -150.9

