RF AMPLIFIER MODEL QBH-8114

Available as: QBH-8114, Hybrid SM (E52-19422)

Features

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to +125 ºC
Storage Temperature ..... -65ºC to + 150 ºC
Case Temperature ..... + 125 ºC
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.)

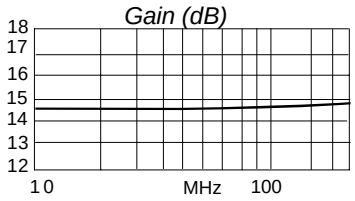
Note:

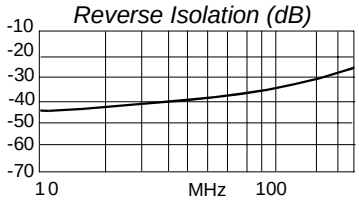
1. Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

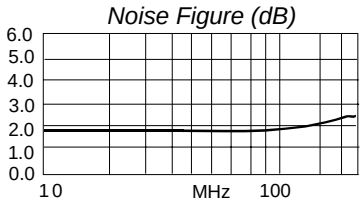
Specifications

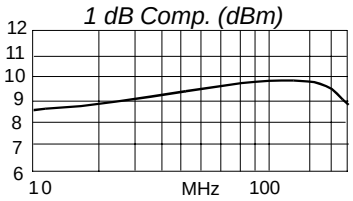
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	10 - 400 MHz	—
Gain (dB)	14.4 ±0.6	—
Gain vs. Temperature	—	—
Gain Flatness	0.6	—
Reverse Isolation (dB)	-24	—
VSWR In Out	1.5:1 1.6:1	—
1 dB Compression (dBm)	+7	—
Output Intercept point 3rd Order 2nd Order	 +20 +30	—
Noise Figure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

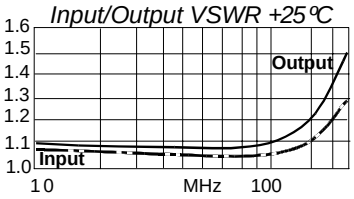
Typical Performance Data

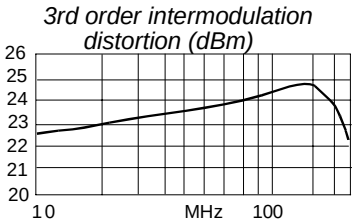












Legend ——— + 25 ºC – – – + 85 ºC - - - - - - -55 ºC

Linear S-Parameters Data

FREQ. MHz	S11 dB	S11 Ang	S21 dB	S21 Ang	S12 dB	S12 Ang	S22 dB	S22 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

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