

RF AMPLIFIER

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

MODEL QBH-8114

Features

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

Specifications

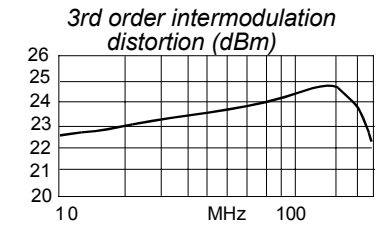
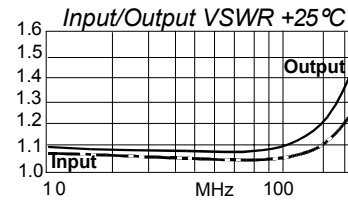
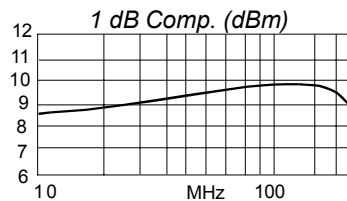
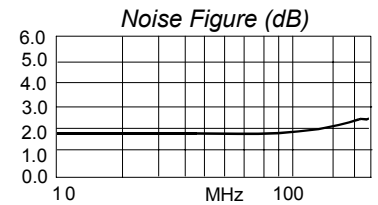
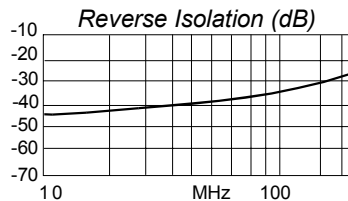
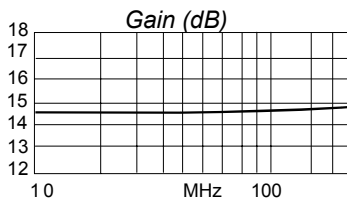
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 400 MHz	—
Gain (dB)	14.4 ±0.6	—
Gain vs. Temperature	—	—
Gain Flatness	0.6	—
Reverse Isolation (dB)	-24	—
VSWR In	1.5:1	—
Out	1.6:1	—
1 dB Compression (dBm)	+7	—
Output Intercept Point		
3rd Order	+20	—
2nd Order	+30	—
Noise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

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

Absolute Maximum (No Damage) 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.)

Typical Performance Data



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

Linear S-Parameters Data

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



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