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

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	1.5:1	--
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.

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 mW (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

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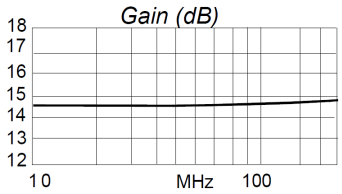
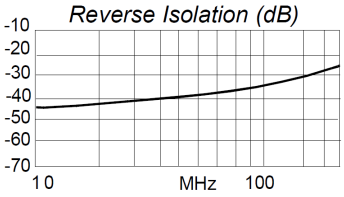
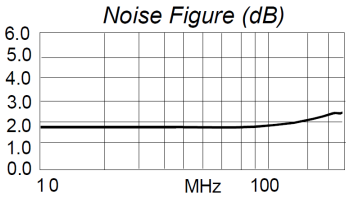
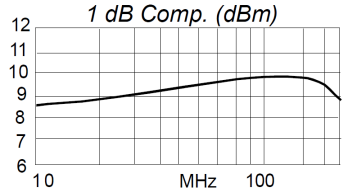
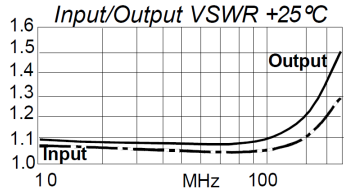
Typical Performance Data

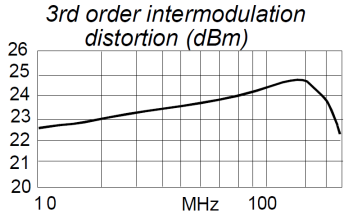












Legend ——— +25 °C – – – +85 °C - - - - - - -55 °C

Linear S-Parameters Data

FREQ.	—— S11 ——		—— S21 ——		—— S12 ——		—— S22 ——	
MHz	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