

RF Amplifier

Model QBH-8407

Available as

- QBH-8407
- Hybrid SM (E52-19422)

Features

- **High Gain:** 10.0 dB Typical
- **High Power:** +28 dBm Typical
- **Operating Temp.:** - 40 °C to +70 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL TA = 25°C	MIN/MAX TA = -40°C to +70°C
Frequency	50 - 2000 MHz	50 - 2000 MHz
Gain (dB)	10.0 Min.	--
Gain vs. Temperature	--	+1.5 Max.
Gain Flatness	0.8	1.8 Max.
Reverse Isolation (dB)	-20	-19 Min.
VSWR	In 1.7:1 Out 1.5:1	2.1:1 Max. 2.0:1 Max.
1 dB Compression (dBm)	+28	+24.5 Min.
Output Intercept Point		
3rd Order	+42	+37 Min.
2nd Order	+50	+45 Min.
Noise Figure (dB)	4.5	7.5 Max.
Power	Vdc +15 mA 220	+15 240 Max.

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

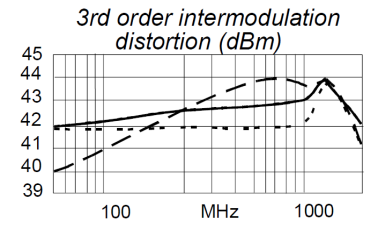
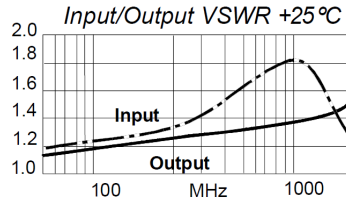
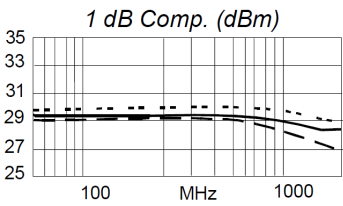
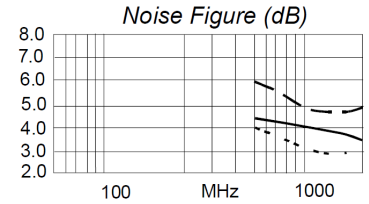
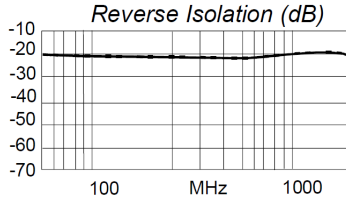
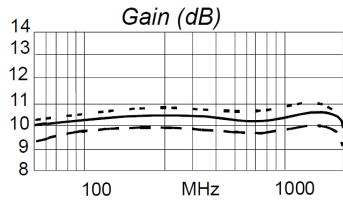
Absolute Maximum Ratings

Ambient Operating Temperature	-55°C to +125°C
Storage Temperature	-65°C to +150°C
Case Temperature	+125°C
DC Voltage	+18 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 - - - - +70 °C - - - - -40 °C

Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
50	-19.9	-133.9	9.8	-177.4	-21.0	-9.2	-23.7	-118.1
90	-19.3	-147.0	10.2	170.5	-21.3	-15.4	-20.8	-146.4
300	-15.2	-167.8	10.4	124.9	-21.7	-44.8	-18.0	177.8
600	-12.1	157.1	10.3	66.1	-21.7	-87.1	-16.9	146.5
900	-11.1	118.2	10.2	8.3	-21.5	-131.4	-16.1	112.7
1200	-11.1	75.5	10.4	-51.0	-21.0	-178.2	-15.7	75.5
1500	-12.8	20.3	10.5	-113.1	-20.5	130.7	-15.0	31.7
1800	-17.9	-78.8	10.4	-179.5	-20.1	75.0	-14.2	-27.8
2000	-14.5	174.8	10.0	133.2	-20.1	33.6	-13.5	-75.9