

RF Amplifier

Model QBH-8911

Available as

- QBH-8911
- Hybrid SM (E52-19422)

Features

- **High Gain:** 10.0 dB Typical
- **High Power:** +25 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	--	+0.8/-0.8 Max.
Gain Flatness	1.0	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)	+25	+24 Min.
Output Intercept Point		
3rd Order	+40	+35 Min.
2nd Order	+48	+43 Min.
Noise Figure (dB)	4.5	7.5 Max.
Power	Vdc +12 mA 220	+12 240 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.

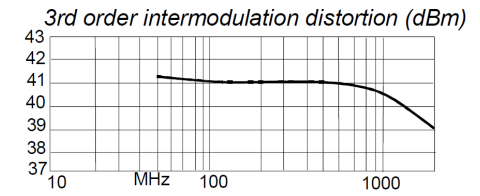
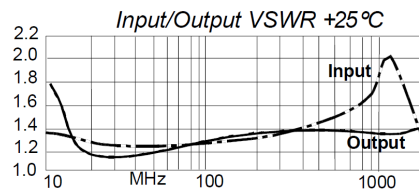
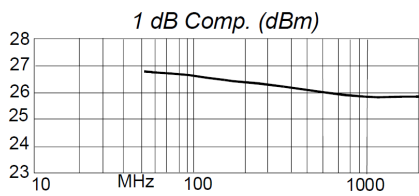
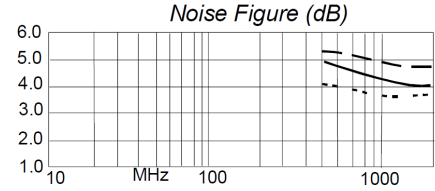
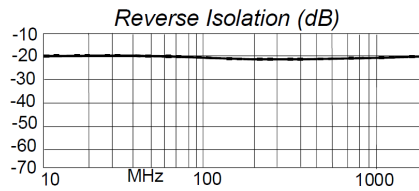
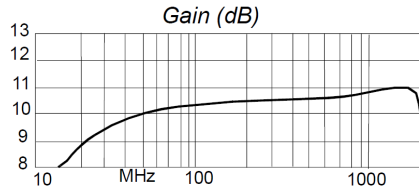
Absolute Maximum Ratings

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

Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
50	-18.9	-138.3	10.0	-175.8	-21.3	-10.9	-19.7	-131.8
100	-18.3	-154.7	10.4	169.7	-21.8	-17.1	-17.4	-159.8
230	-16.7	-166.7	10.6	142.7	-22.1	-33.0	-16.5	173.7
500	-13.6	169.9	10.6	92.7	-22.3	-67.9	-16.5	143.1
800	-11.3	137.5	10.6	38.7	-22.2	-107.8	-17.1	121.1
1100	-9.9	102.2	10.7	-16.6	-22.0	-148.7	-17.4	110.8
1400	-9.5	63.0	10.8	-74.2	-21.7	167.8	-16.0	93.8
1700	-12.7	13.4	10.9	-136.4	-21.2	119.0	-15.2	57.2
2000	-15.2	-175.4	10.3	152.3	-21.5	60.4	-21.0	-26.5