

RF AMPLIFIER

Available as: QBH-8911, Hybrid SM (E52-19422)

MODEL QBH-8911

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	2.1:1 Max.
VSWR Out	1.5:1	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	+12
mA	220	240 Max.

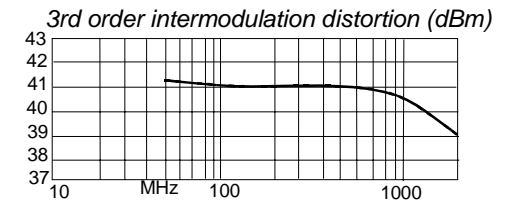
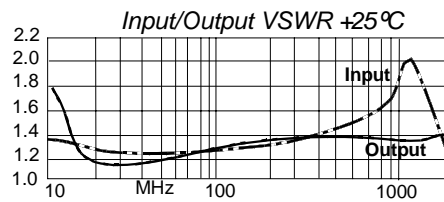
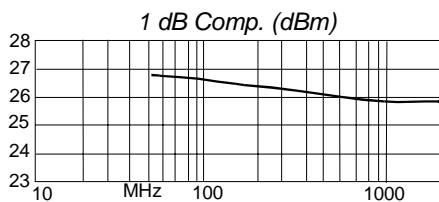
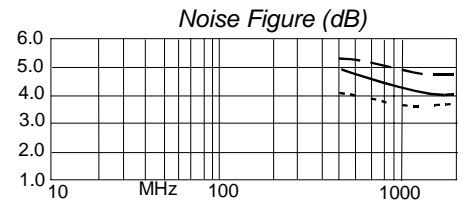
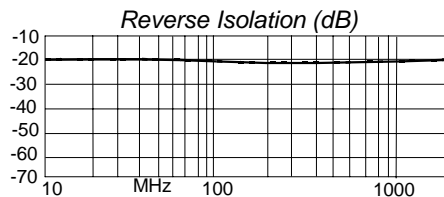
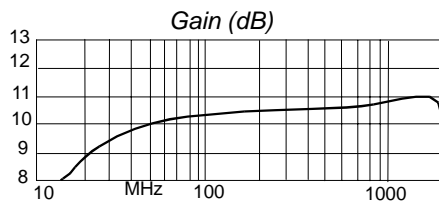
Maximum Ratings

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 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.
2. Noise Figures increase below 500 NHz

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



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