

Hybrid Amplifiers High Dynamic Range

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit		Units
Temperature	+25 (Typical)	-40 to +70	°C
Frequency Range	800 - 960		MHz
Small Signal Gain	22.0 ± 0.5		dB
Gain vs. Temperature		+0.7 / -0.7	dB Max
Gain Flatness	1.0		dB Max p-p
Reverse Isolation			dB Min
VSWR Input	1.5:1	1.5:1	Max
VSWR Output	1.5:1	1.5:1	Max
1 dB Compression	+31.5	+31	dBm Min
Output Intercept Point 3rd Order	+47	+46	dBm Min
Output Intercept Point 2nd Order			dBm Min
Noise Figure	3.0	3.0	dB Max
DC Power @ 15 Vdc ± 1%	350	370	mA Max
Gain vs. Vdc	0.20		dB/Volt Max
Housing	Hybrid SM (E52-19422)		

QBH-8900

Absolute Maximum Ratings

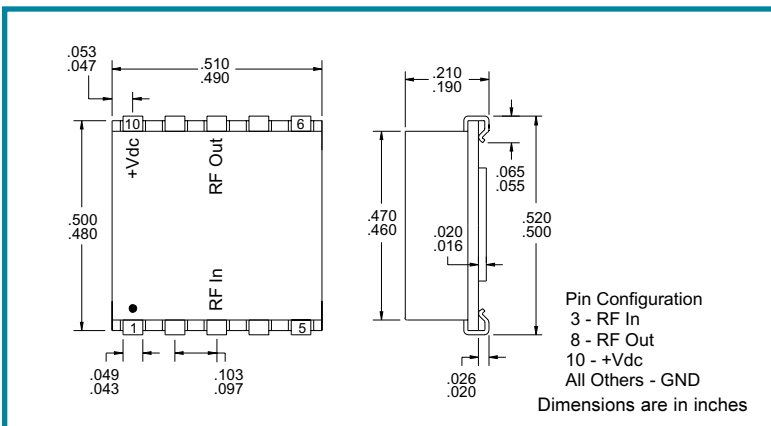
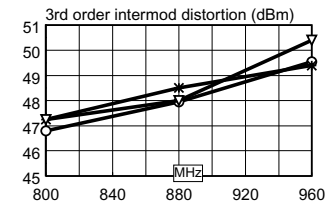
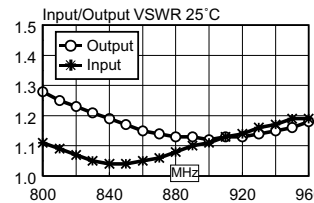
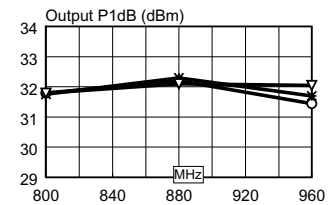
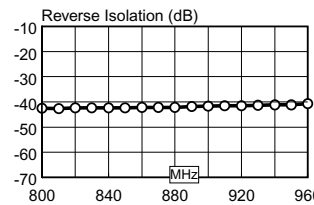
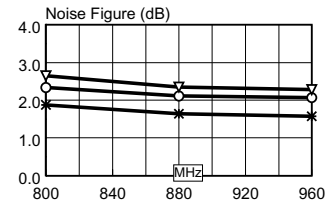
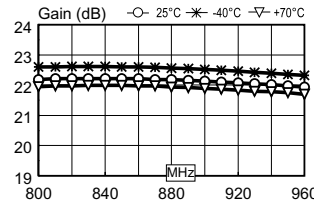
Power Supply Voltage	
Sustaining	18.0 Vdc
Pulse (transient)	20.0 Vdc
Temperature	
Operating	-55 to +100°C
Storage	-65 to +125°C
Max Input Drive	3.0 VRMS
Thermal Rise, junction-to-case	+34°C

Notes:

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

Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
800	-26.2	-72.8	22.2	101.9	-42.6	29.5	-18.2	-133.0
830	-31.6	-36.3	22.2	89.0	-42.4	26.0	-20.5	-134.5
850	-38.1	-12.4	22.2	80.6	-42.4	23.6	-22.2	-133.3
870	-30.6	-7.6	22.2	72.4	-42.2	22.4	-23.6	-129.1
890	-26.6	-4.7	22.2	64.4	-41.8	18.8	-24.6	-120.8
910	-24.4	-7.1	22.1	56.5	-41.5	17.9	-24.6	-107.0
930	-22.7	-11.1	22.0	48.8	-41.3	15.9	-24.0	-90.7
950	-21.5	-15.8	22.0	41.2	-41.1	13.0	-22.8	-75.7
960	-21.1	-19.5	21.9	37.4	-40.7	11.7	-22.1	-70.0



Specifications subject to change without notice.