

Hybrid Amplifiers Low Noise Figure

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit		Units
Temperature	+25 (Typical)	-20 to +85	°C
Frequency Range	1850 - 1910		MHz
Small Signal Gain	26.75 ± 0.75		dB
Gain vs. Temperature			dB Max
Gain Flatness	0.8	0.8	dB Max p-p
Reverse Isolation	45	45	dB Min
VSWR Input	1.4:1	1.4:1	Max
Output	1.5:1	1.5:1	Max
1 dB Compression	+24	+24	dBm Min
Output Intercept Point			
3rd Order	+37	+37	dBm Min
2nd Order			dBm Min
Noise Figure	1.0	1.4	dB Max
DC Power @ 15 Vdc ± 1%	210		mA Max
Gain vs. Vdc			dB/Volt Max
Housing	Hybrid SM (E52-19422)		

QBH-8762

Absolute Maximum Ratings

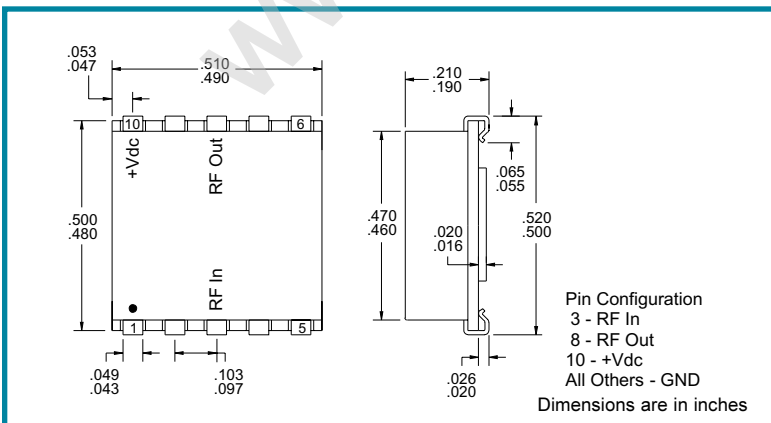
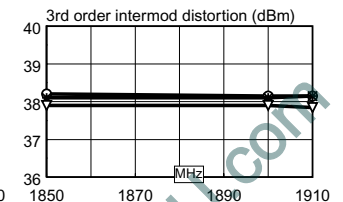
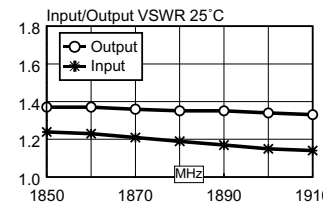
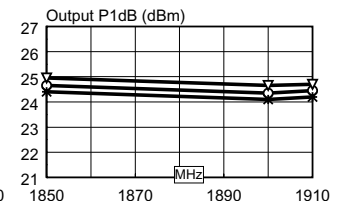
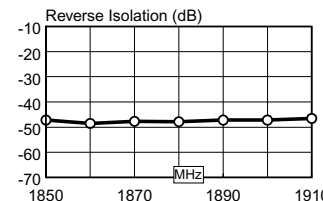
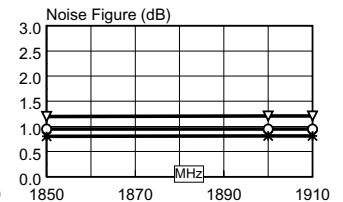
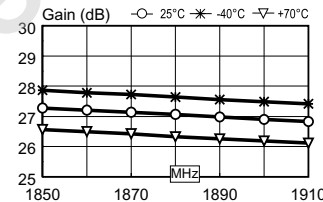
Power Supply Voltage	
Sustaining	15.5 Vdc
Pulse (transient)	15.5 Vdc
Temperature	
Operating	-60 to +85°C
Storage	-65 to +150°C
Max Input Drive	1.0 VRMS
Thermal Rise, junction-to-case	+58°C

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
1850	-19.6	66.9	27.3	-67.8	-47.2	-175.8	-16.1	175.0
1860	-20.2	66.7	27.2	-70.4	-48.6	-177.4	-16.2	173.6
1870	-20.8	65.8	27.1	-73.1	-47.7	-176.8	-16.3	172.0
1880	-21.8	65.7	27.1	-75.9	-47.8	-173.1	-16.4	170.2
1890	-22.8	65.8	27.0	-78.7	-47.1	-171.0	-16.5	168.8
1900	-24.0	65.1	26.9	-81.4	-47.3	-170.0	-16.7	166.9
1910	-25.3	63.3	26.8	-84.3	-46.6	-168.9	-16.9	166.1



Specifications subject to change without notice.