

Hybrid Amplifiers Low Noise Figure

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit		Units
Temperature	+25 (Typical)	-40 to +70	°C
Frequency Range	800 - 825		MHz
Small Signal Gain	16.0 min		dB
Gain vs. Temperature		+1.5 /	dB Max
Gain Flatness	0.3	0.6	dB Max p-p
Reverse Isolation	21	19	dB Min
VSWR Input	1.5:1	2.0:1	Max
Output	1.6:1	2.0:1	Max
1 dB Compression	+27	+26	dBm Min
Output Intercept Point			
3rd Order	+41	+38	dBm Min
2nd Order			dBm Min
Noise Figure	1.1	1.5	dB Max
DC Power @ 15 Vdc ± 1%	150	170	mA Max
Gain vs. Vdc			dB/Volt Max
Housing	Hybrid SM (E52-19422)		

QBH-8714

Absolute Maximum Ratings

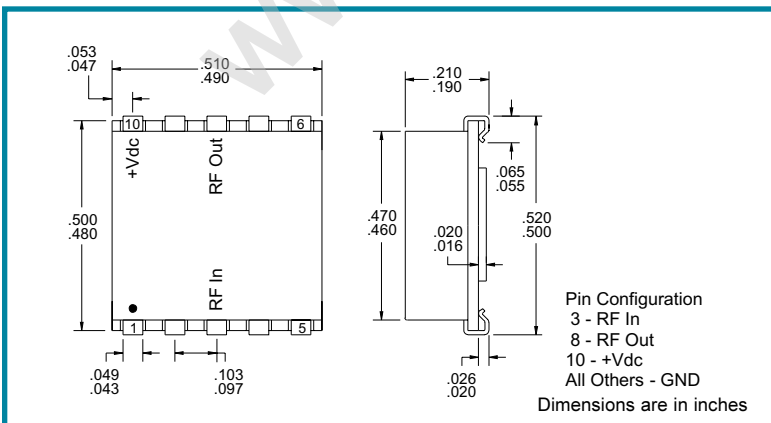
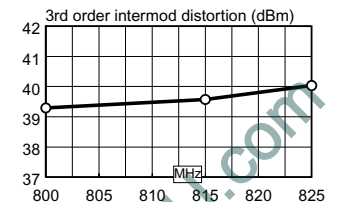
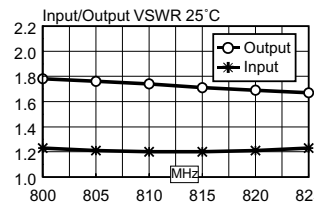
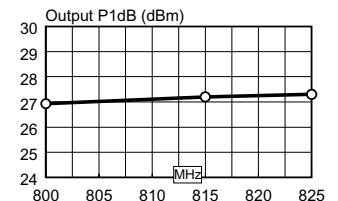
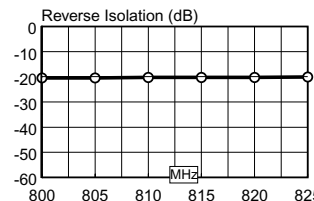
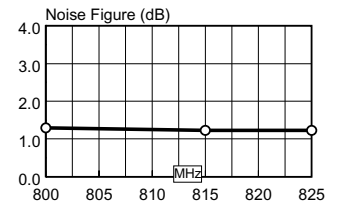
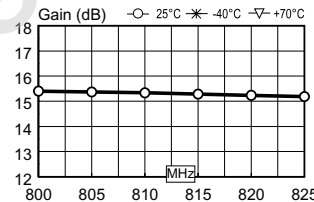
Power Supply Voltage
Sustaining 20.0 Vdc
Pulse (transient) 20.0 Vdc
Temperature
Operating -55 to +125°C
Storage -65 to +150°C
Max Input Drive 2.0 VRMS

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	-21.0	-8.4	15.4	-35.5	-20.5	-45.9	-11.1	-74.6
805	-21.7	-22.3	15.4	-37.9	-20.4	-47.3	-11.2	-78.4
810	-21.6	-32.8	15.3	-40.3	-20.3	-49.6	-11.4	-82.7
815	-21.2	-41.4	15.3	-42.7	-20.3	-51.6	-11.6	-86.9
820	-20.8	-48.5	15.2	-45.1	-20.2	-53.5	-11.9	-91.2
825	-20.7	-54.1	15.2	-47.5	-20.2	-55.4	-12.1	-95.5



Specifications subject to change without notice.