

## Hybrid Amplifiers High Dynamic Range

### Electrical Specifications <sup>(1)</sup>:

Parameter	Specification Limit		Units
Temperature	+25 (Typical)	-40 to +70	°C
Frequency Range	30 - 145		MHz
Small Signal Gain	21.5 ± 1.5		dB
Gain vs. Temperature			dB Max
Gain Flatness	0.2	1.0	dB Max p-p
Reverse Isolation	32	26	dB Min
VSWR Input	1.2:1	1.5:1	Max
Output	1.2:1	1.7:1	Max
1 dB Compression	+25	+23	dBm Min
Output Intercept Point			
3rd Order	+40	+37	dBm Min
2nd Order	+51	+48	dBm Min
Noise Figure	2.5	3.0	dB Max
DC Power @ 15 Vdc ± 1%	105	115	mA Max
Gain vs. Vdc			dB/Volt Max
Housing	Hybrid SM (E52-19422)		

## QBH-8719

### Absolute Maximum Ratings

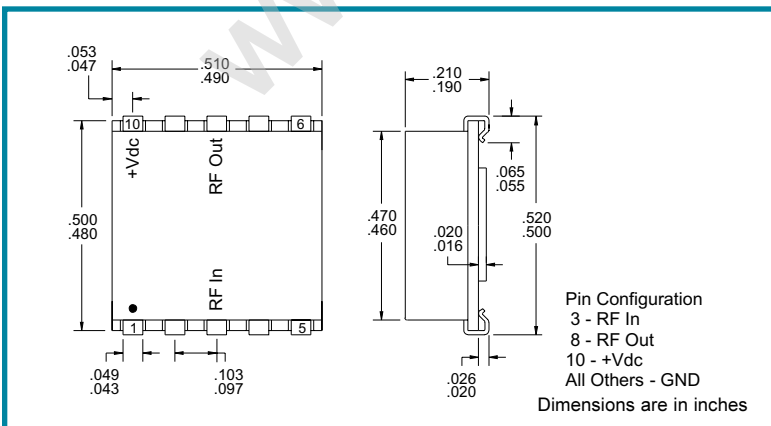
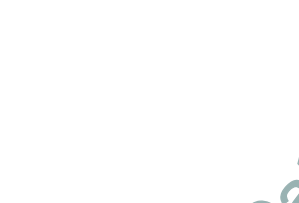
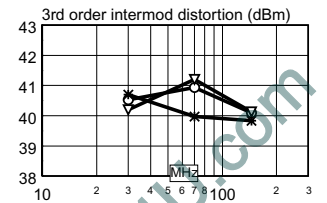
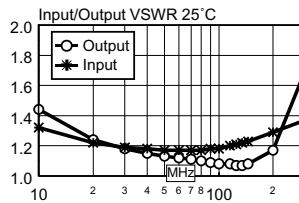
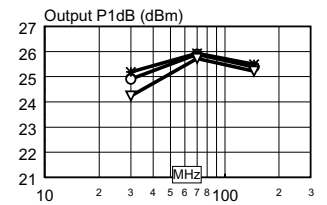
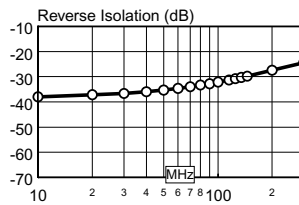
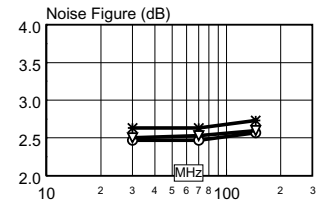
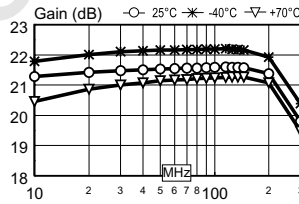
Power Supply Voltage	
Sustaining	.....15.0 Vdc
Temperature	
Operating	.....-55 to +125°C
Storage	.....-65 to +150°C
Max Input Drive	.....1.0 VRMS
Thermal Rise, junction-to-case	...+54°C

**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
30	-21.2	-37.6	21.5	170.8	-36.6	31.9	-21.6	96.9
60	-22.2	-42.2	21.5	155.5	-34.6	33.1	-25.0	73.6
70	-22.1	-44.8	21.6	150.7	-33.9	35.0	-25.9	65.5
80	-22.0	-48.0	21.6	146.0	-33.4	34.6	-26.7	56.8
100	-21.5	-54.7	21.6	136.6	-32.1	34.6	-28.8	37.8
115	-21.0	-61.6	21.6	129.4	-31.3	34.0	-30.2	21.8
125	-20.5	-65.6	21.6	124.6	-30.8	32.9	-30.0	9.6
135	-20.2	-70.5	21.6	119.8	-30.3	32.6	-29.3	-4.6
145	-19.8	-76.0	21.6	114.9	-29.8	31.1	-28.7	-20.4



Specifications subject to change without notice.