

## Hybrid Amplifiers High Dynamic Range

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

Parameter	Specification Limit		Units
Temperature	+25	-55 to +85	°C
Frequency Range	10 - 200		MHz
Small Signal Gain	7.9 ± 0.5		dB
Gain vs. Temperature		+0.7 / -0.8	dB Max
Gain Flatness	0.8	1.4	dB Max p-p
Reverse Isolation	10	9	dB Min
VSWR Input	1.5:1	1.6:1	Max
Output	1.5:1	1.6:1	Max
1 dB Compression	+20	+19	dBm Min
Output Intercept Point			
3rd Order	+36	+32	dBm Min
2nd Order	+49	+48	dBm Min
Noise Figure	3.2	3.5	dB Max
DC Power @ 15 Vdc ± 1%	31	33	mA Max
Gain vs. Vdc			dB/Volt Max
Housing	TO-8 (E52-1204)		

## QBH-870

### Absolute Maximum Ratings

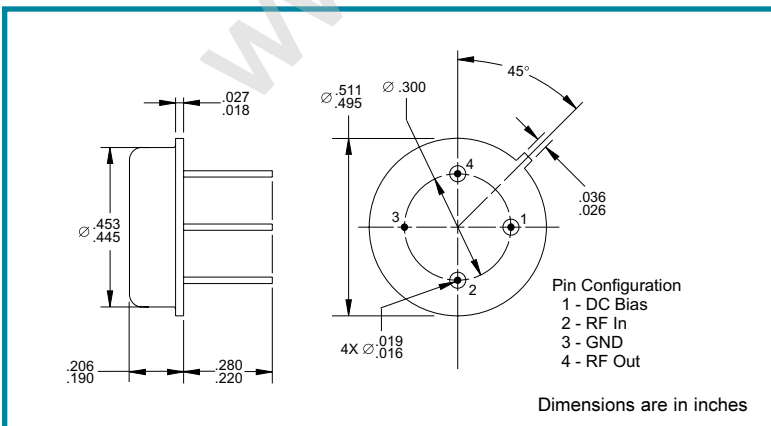
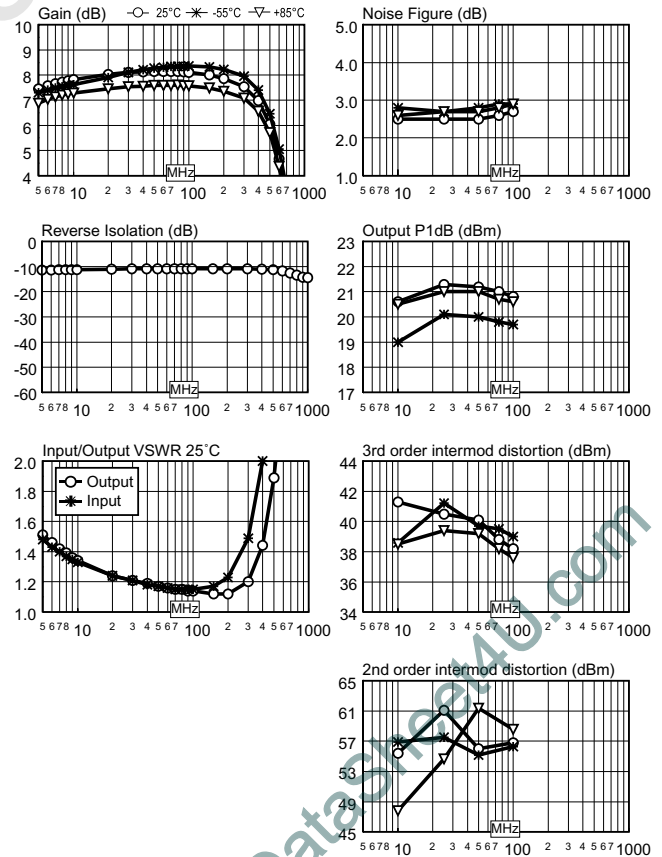
Power Supply Voltage	
Sustaining	18.5 Vdc
Pulse (transient)	18.5 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Thermal Rise, junction-to-case	+21°C

**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
10	-16.9	143.6	7.8	8.2	-11.1	8.3	-16.7	145.9
40	-21.7	154.1	8.1	-10.2	-10.9	-10.4	-21.4	141.9
50	-22.1	155.7	8.2	-14.2	-10.8	-14.5	-22.0	139.6
60	-22.5	157.2	8.1	-18.1	-10.8	-18.4	-22.5	137.0
80	-23.1	162.0	8.1	-25.4	-10.8	-25.8	-23.2	130.8
90	-23.1	161.9	8.1	-29.0	-10.8	-29.5	-23.5	127.8
100	-23.1	162.2	8.1	-32.5	-10.8	-33.0	-23.8	124.3
150	-22.2	168.9	8.0	-49.8	-10.8	-50.7	-24.7	108.7
200	-20.0	174.1	7.9	-66.7	-10.9	-68.1	-25.3	102.6



Specifications subject to change without notice.