

## Hybrid Amplifiers Low Noise Figure

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

Parameter	Specification Limit		Units
Temperature	+25	-55 to +85	°C
Frequency Range	3 - 100		MHz
Small Signal Gain	16.3 ± 0.5		dB
Gain vs. Temperature		+0.7 / -0.5	dB Max
Gain Flatness	0.4	0.8	dB Max p-p
Reverse Isolation	35	35	dB Min
VSWR Input	1.5:1	1.5:1	Max
VSWR Output	1.5:1	1.5:1	Max
1 dB Compression	+11	+8	dBm Min
Output Intercept Point			
3rd Order	+26	+23	dBm Min
2nd Order	+38	+35	dBm Min
Noise Figure	1.9	2.1	dB Max
DC Power @ 15 Vdc ± 1%	21	22	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	TO-8 (E52-1213)		

## QBH-118

### Absolute Maximum Ratings

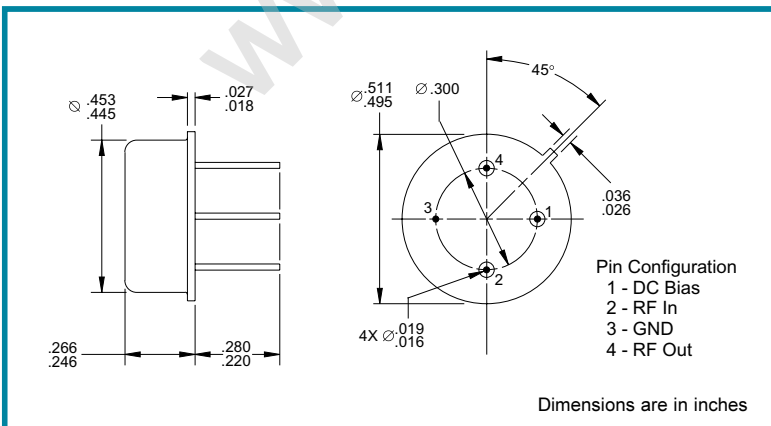
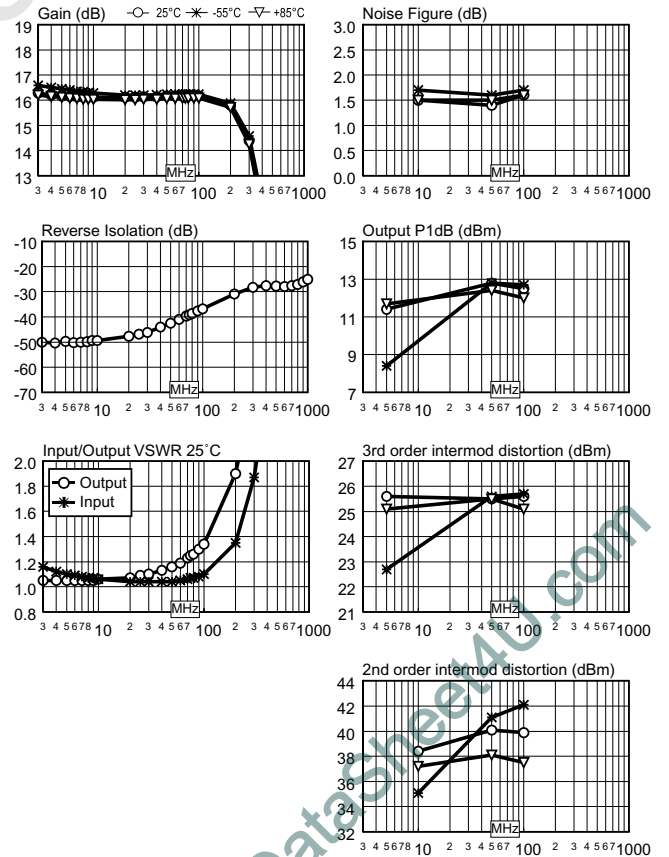
Power Supply Voltage	
Sustaining	20.0 Vdc
Pulse (transient)	25.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Max Input Drive	1.0 VRMS
Thermal Rise, junction-to-case	+14°C

**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
3	-22.8	-101.5	16.3	-178.6	-50.1	74.8	-31.6	48.5
7	-28.4	-129.9	16.1	177.8	-50.0	47.5	-32.0	3.4
9	-29.9	-139.5	16.1	176.7	-49.4	42.2	-31.6	-9.9
20	-33.2	-162.2	16.1	171.4	-47.8	51.3	-28.9	-49.2
30	-34.0	-163.9	16.1	166.8	-46.2	46.8	-26.4	-67.4
50	-33.5	-155.7	16.2	157.3	-42.5	47.3	-22.6	-89.3
70	-31.1	-151.7	16.2	147.9	-39.6	47.3	-19.8	-104.4
80	-29.7	-152.3	16.2	143.2	-38.7	45.3	-18.7	-111.0
100	-27.0	-157.9	16.2	133.6	-36.8	38.7	-16.7	-122.8



Specifications subject to change without notice.