

Hybrid Amplifiers High Dynamic Range

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit		Units
Temperature	+25	-55 to +85	°C
Frequency Range	5 - 400		MHz
Small Signal Gain	12.2 ± 0.5		dB
Gain vs. Temperature	+0.5 / -0.5		dB Max
Gain Flatness	0.6	0.8	dB Max p-p
Reverse Isolation	25	24	dB Min
VSWR Input	1.5:1	1.6:1	Max
VSWR Output	1.5:1	1.6:1	Max
1 dB Compression	+16	+15	dBm Min
Output Intercept Point			
3rd Order	+29	+28	dBm Min
2nd Order	+38	+37	dBm Min
Noise Figure	6.0	6.4	dB Max
DC Power @ 15 Vdc ± 1%	47	48	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	TO-8 (E52-1213)		

QBH-116

Absolute Maximum Ratings

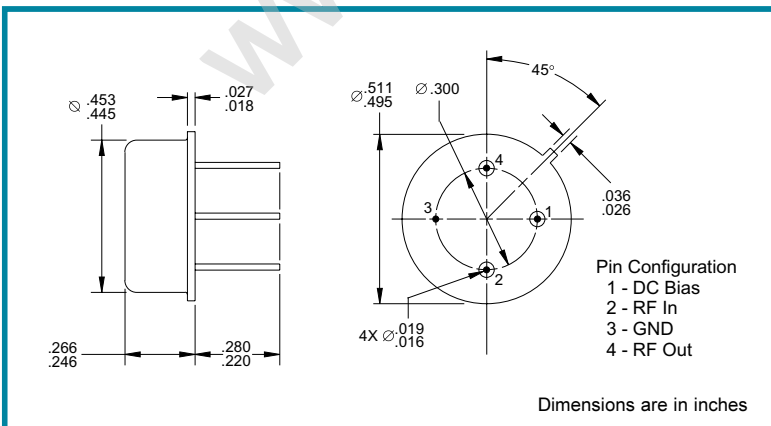
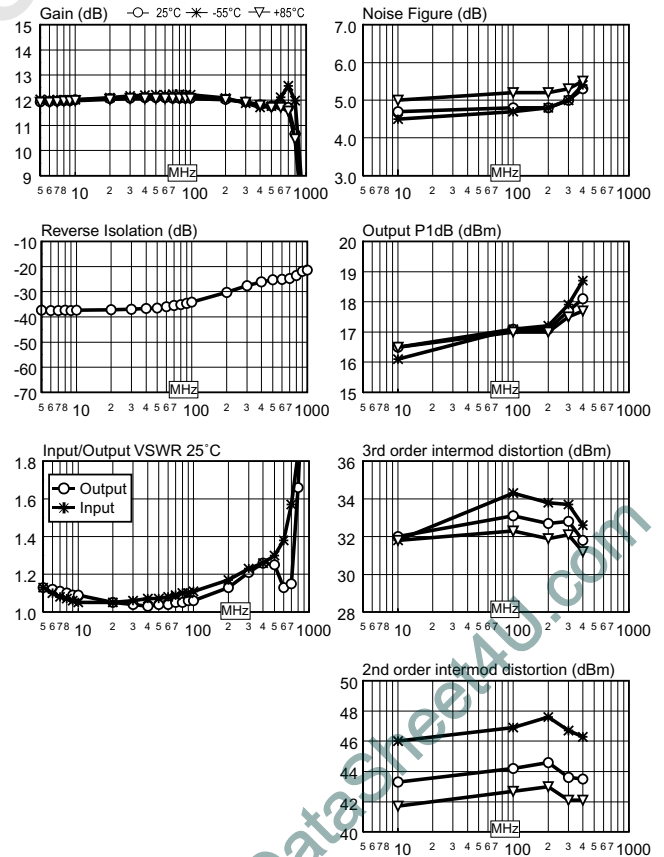
Power Supply Voltage	
Sustaining	18.5 Vdc
Pulse (transient)	18.5 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Max Input Drive	1.7 VRMS
Thermal Rise, junction-to-case	+32°C

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
5	-24.2	-84.3	11.9	-168.1	-37.4	13.8	-24.0	117.5
9	-30.8	-67.1	12.0	-175.3	-37.4	10.4	-27.1	101.0
20	-32.9	-33.2	12.1	176.6	-37.2	10.0	-32.0	65.6
40	-29.8	-38.6	12.1	167.8	-36.7	14.7	-35.5	16.1
60	-28.2	-52.0	12.1	160.2	-36.0	17.1	-34.0	-17.4
80	-26.8	-64.8	12.1	152.9	-35.1	22.1	-32.0	-38.1
100	-25.6	-76.5	12.1	145.7	-34.1	22.3	-30.2	-52.5
300	-19.8	-168.7	11.9	74.6	-27.6	0.1	-20.5	-137.6
400	-18.7	149.3	11.8	38.6	-26.0	-20.5	-18.9	-175.1



Specifications subject to change without notice.