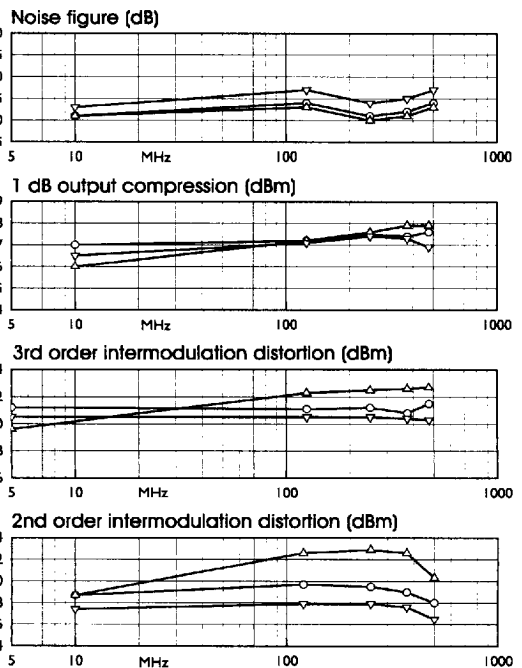
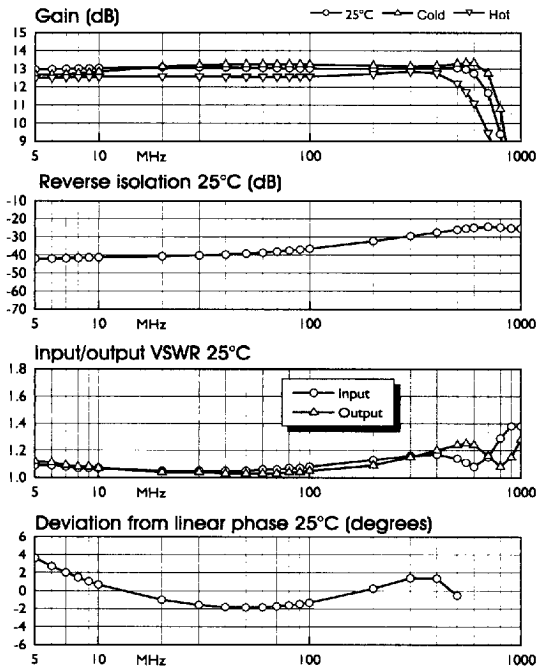


5 - 500 MHz Standard Hybrid Amplifier

QBH-101

- 5-500 MHz bandwidth
- Low noise figure
- TO-8 package
- Quick ship item

Parameters	Specification limit		Units
Temperature	+25	-55 to +100	°C
Frequency range	5 - 500		MHz
Small signal gain	13.0 ± 0.5		dB
Gain vs. temperature		+0.6/-1.1	dB Max
Gain flatness	0.6	1.0	dB Max p-p
Reverse isolation	25	24	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+7	+6	dBm Min
Output intercept point			
3rd Order	+20	+18	dBm Min
2nd Order	+28	+25	dBm Min
Noise figure	2.4	3.0	dB Max
DC power @ 15 Vdc ± 1%	18	19	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	TO-8 (see page P-14 for details)		



Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
5	-27.1	116.5	13.0	-174.8	-42.0	11.2	-24.9	95.1
10	-29.8	110.9	13.0	-179.1	-41.3	12.6	-29.4	77.3
20	-31.9	96.9	13.1	176.3	-40.7	15.3	-33.5	55.0
50	-31.7	71.3	13.1	166.8	-39.3	25.1	-36.2	36.2
100	-28.6	48.4	13.0	152.8	-36.6	33.5	-33.1	31.9
200	-24.4	16.7	13.0	125.5	-32.3	30.1	-26.9	8.3
300	-22.7	-13.1	13.0	97.8	-29.4	17.5	-23.4	-23.0
400	-22.3	-43.9	13.1	68.9	-27.4	2.8	-20.7	-54.7
500	-24.2	-68.7	13.0	38.1	-25.9	-13.5	-19.5	-88.7

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+20.0 Vdc
Pulse (transient)	+22.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Maximum input drive	1.0 VRMS
Thermal rise, junction-to-case	+12°C

H91-0101,0495, Revision A1

Q-bit Corporation • Main 407/727-1838 • Toll Free Sales 800/226-1772 • FAX 407/727-3729

Page H-3

7449331 0000450 491