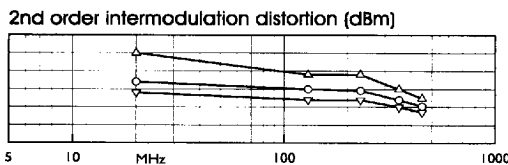
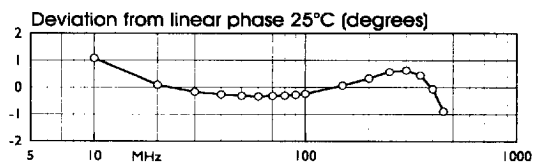
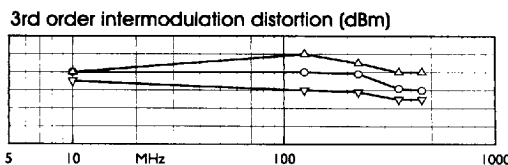
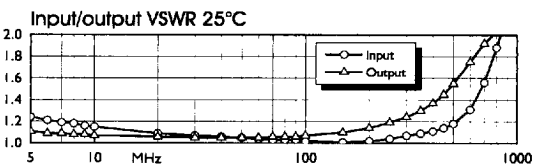
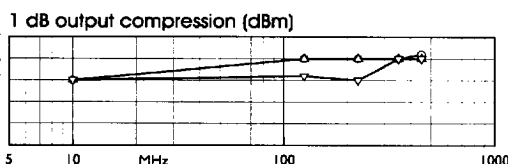
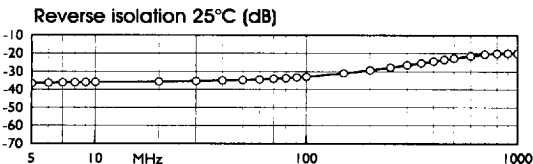
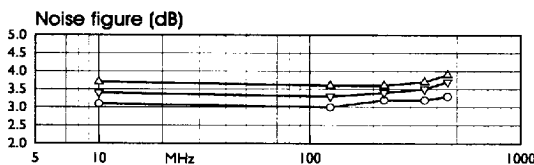
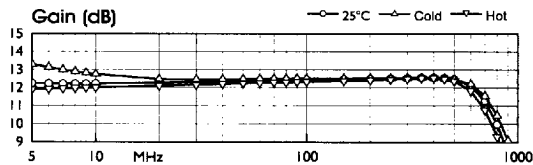


10 - 450 MHz Standard Hybrid Amplifier

QBH-302

- **10-450 MHz bandwidth**
- **Excellent general purpose amplifier**
- **Low VSWR**
- **Extremely flat gain response**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	10 - 450		MHz
Small signal gain	12.5 ± 0.7		dB
Gain vs. temperature	+0.9/-0.9		dB Max
Gain flatness	0.6	1.0	dB Max p-p
Reverse isolation	22	22	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.6:1	1.6:1	Max
1 dB compression	+17	+16	dBm Min
Output intercept point			
3rd Order	+25	+24	dBm Min
2nd Order	+43	+42	dBm Min
Noise figure	4.3	4.8	dB Max
DC power @ 15 Vdc ± 1%	69		mA Max
Gain vs. Vdc			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
10	-23.1	114.7	12.2	-107.7	-35.9	8.0	-29.3	148.8
20	-27.0	106.3	12.3	176.3	-35.6	9.1	-31.1	164.0
50	-32.7	84.3	12.4	166.8	-34.8	14.6	-31.9	171.1
150	-45.2	24.7	12.5	137.0	-30.9	20.1	-26.4	145.9
250	-33.6	134.8	12.5	107.3	-27.8	9.4	-21.4	158.4
350	-27.4	110.7	12.6	77.0	-25.4	-8.1	-17.7	36.2
450	-23.8	94.4	12.5	45.5	-23.5	-27.4	-14.7	153.2

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+17.0 Vdc
Pulse (transient)	+17.0 Vdc
Temperature	
Operating	-54 to +85°C
Storage	-65 to +150°C
Maximum input drive	1.2 VRMS
Thermal rise, junction-to-case	+31°C

H91-0302.0495, Revision B1

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

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