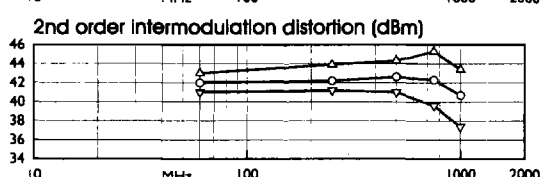
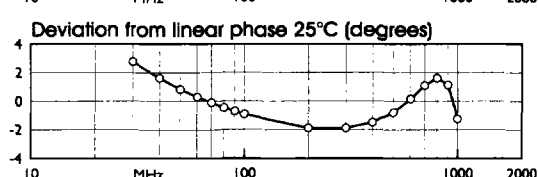
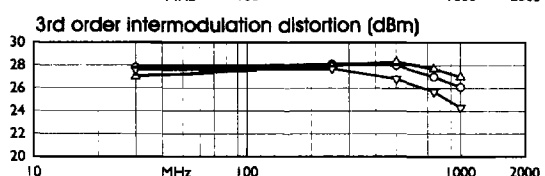
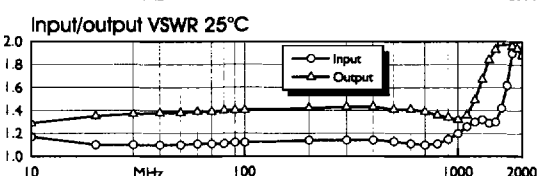
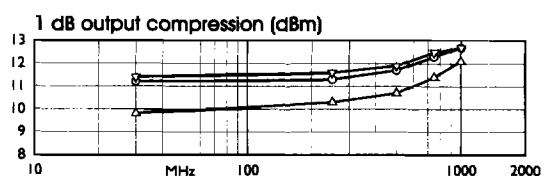
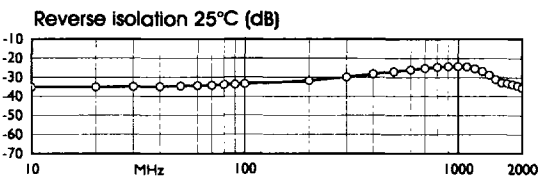
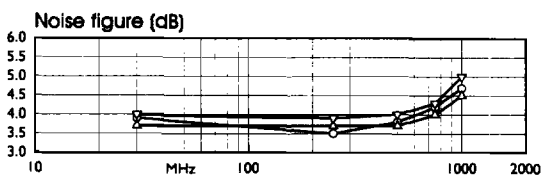
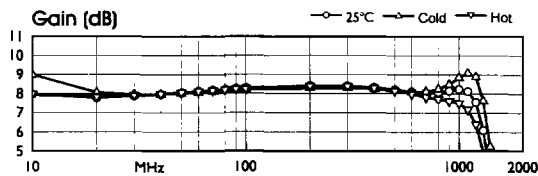


30 - 1000 MHz Standard Hybrid Amplifier

QBH-847

- **30-1000 MHz bandwidth**
- **Guaranteed specifications over temperature**
- **Low profile TO-8 package**
- **Wide bandwidth**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	30 - 1000		MHz
Small signal gain	8.0 ± 0.5		dB
Gain vs. temperature		+0.8/-1.2	dB Max
Gain flatness	0.9	1.4	dB Max p-p
Reverse isolation	22	22	dB Min
VSWR Input	1.5:1	1.7:1	Max
Output	1.6:1	1.7:1	Max
1 dB compression	+10	+9	dBm Min
Output intercept point			
3rd Order	+23	+22	dBm Min
2nd Order	+33	+30	dBm Min
Noise figure	5.0		dB Max
DC power @ 15 Vdc ± 1%	27	29	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	TO-8 LP (see page P-13 for details)		



HYBRID

Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
30	-26.6	75.4	7.9	-178.8	-34.9	19.8	-16.2	0.1
50	-26.2	42.8	8.0	174.1	-34.5	15.1	-15.8	-4.4
100	-25.1	-4.8	8.3	159.6	-33.5	11.5	-15.5	-14.7
200	-23.9	-62.3	8.4	132.9	-31.7	5.0	-15.2	-33.6
400	-23.8	-147.5	8.3	82.0	-28.3	-19.0	-15.1	-71.0
600	-26.1	14.2	8.1	32.4	-26.1	-53.1	-15.5	-113.7
800	-28.6	6.4	8.1	-17.5	-24.7	-91.5	-16.3	-161.9
1000	-21.2	-61.3	8.2	-71.6	-24.2	-134.3	-17.4	127.1

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+19.0 Vdc
Pulse (transient)	+25.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Maximum input drive	1.1 VRMS
Thermal rise, junction-to-case	+13°C

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