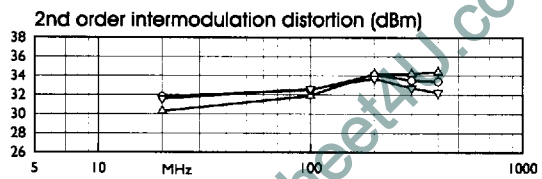
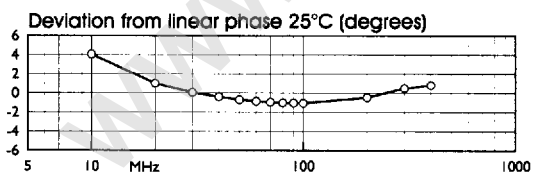
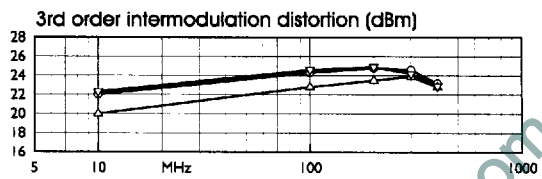
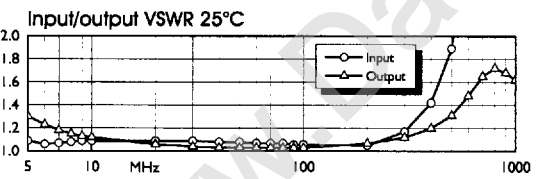
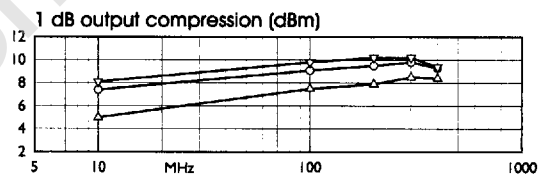
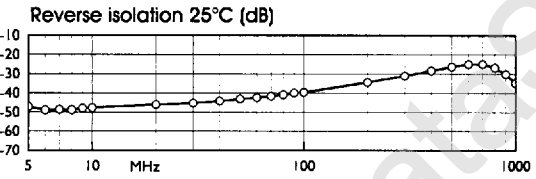
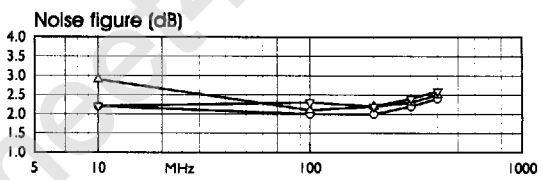
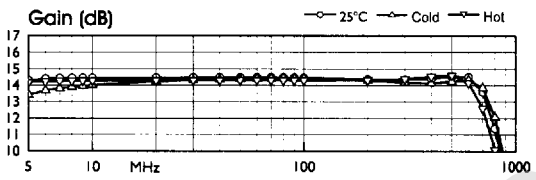


10 - 400 MHz Standard Hybrid Amplifier

QBH-114

- 10-400 MHz bandwidth
- Low noise figure
- Low power operation
- High reverse isolation
- Excellent VSWR

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	10 - 400		MHz
Small signal gain	14.4 ± 0.6		dB
Gain vs. temperature	+0.4/-0.8		dB Max
Gain flatness	0.6	1.0	dB Max p-p
Reverse isolation	26	26	dB Min
VSWR Input	1.5:1	1.6:1	Max
Output	1.5:1	1.6:1	Max
1 dB compression	+7	+4.5	dBm Min
Output intercept point			
3rd Order	+20	+19	dBm Min
2nd Order	+30	+28	dBm Min
Noise figure	3.0	3.5	dB Max
DC power @ 5 Vdc ± 1%	25	28	mA Max
Gain vs. Vdc	0.70		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	-27.6	158.5	14.5	-176.5	-47.7	48.6	-25.1	105.7
50	-28.6	163.5	14.5	167.7	-43.1	41.4	-36.5	157.7
100	-30.8	92.0	14.5	153.5	-39.6	44.1	-35.9	-164.5
200	-31.7	-151.3	14.4	126.4	-34.4	36.0	-30.0	-143.9
300	-22.1	-151.2	14.3	99.6	-31.0	20.0	-25.0	-151.8
400	-15.3	-34.0	14.4	72.3	-28.3	0.5	-21.0	-170.4

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+12.0 Vdc
Pulse (transient)	+14.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Maximum input drive	1.2 VRMS
Thermal rise, junction-to-case	+4°C

H91-0114-0495, Revision A2

HYBRID