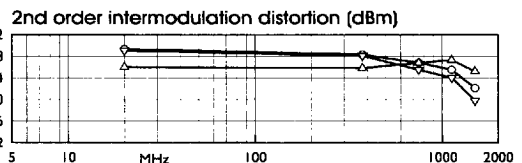
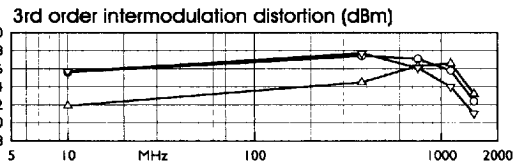
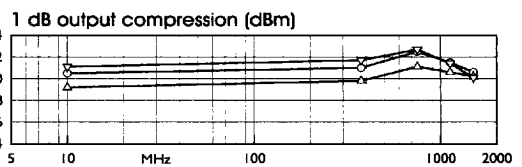
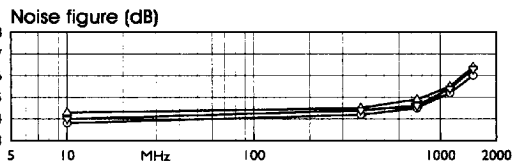
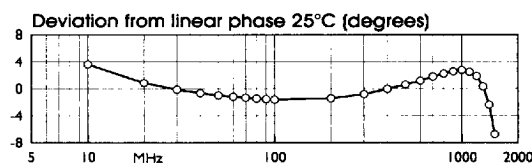
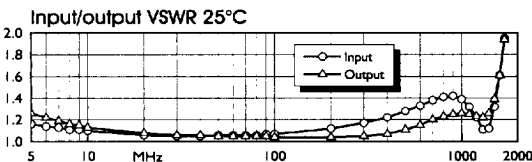
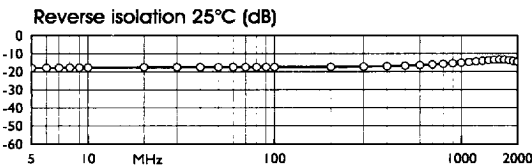
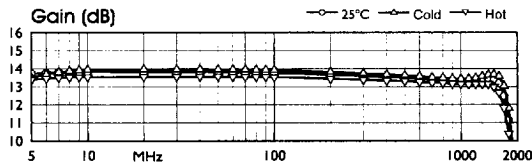


10 - 1500 MHz Standard Hybrid Amplifier

QBH-5817

- **10-1500 MHz bandwidth**
- **High 3rd order intercept point**
- **Wide bandwidth**
- **Very flat gain response**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	10 - 1500		MHz
Small signal gain	13.5 ± 0.5		dB
Gain vs. temperature	+0.6/-0.7		dB Max
Gain flatness	1.0	1.0	dB Max p-p
Reverse isolation	13.5	13.5	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+20	+19	dBm Min
Output intercept point			
3rd Order	+32	+30	dBm Min
2nd Order	+42	+39	dBm Min
Noise figure	6.0	6.5	dB Max
DC power @ 15 Vdc ± 1%	100	102	mA Max
Gain vs. Vdc	0.25		dB/Volt Max
Housing	F-PACK .450 SQ SMD (see page P-30 for details)		



Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
10	-26.7	-83.0	13.8	-176.7	-17.7	4.1	-24.1	120.0
100	-29.1	-132.7	13.8	156.1	-17.5	-13.0	-33.3	112.5
300	-22.2	36.4	13.6	108.0	-17.3	-40.0	-32.9	102.7
600	-16.9	115.0	13.4	36.8	-16.4	-82.3	-23.0	84.8
900	-15.3	51.9	13.3	-35.1	-15.4	-128.7	-19.0	42.2
1200	-20.4	-5.4	13.4	-109.1	-14.4	-106.9	-19.7	17.3
1500	-17.3	62.4	13.4	169.0	-13.5	125.0	-15.8	32.6

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+ 16.5 Vdc
Pulse (transient)	+ 16.5 Vdc
Temperature	
Operating	-55 to +105°C
Storage	-65 to +150°C
Maximum input drive	1.4 VRMS
Thermal rise, junction-to-case	+ 65°C

H91-5817.0495, Revision A1

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