

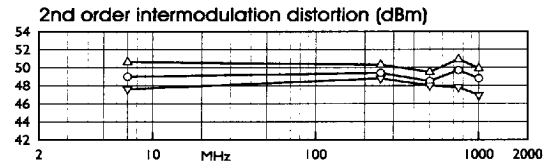
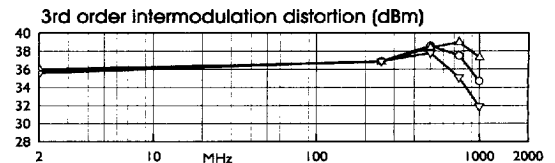
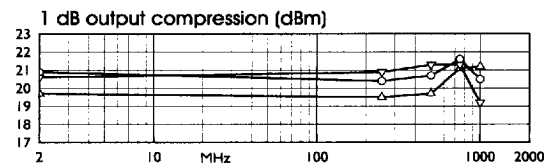
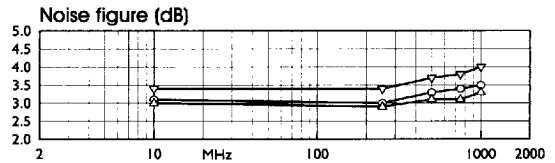
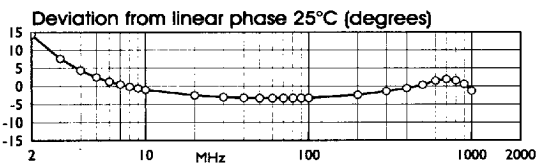
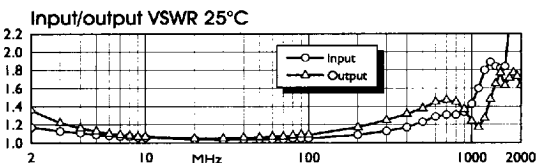
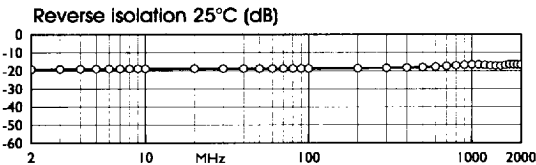
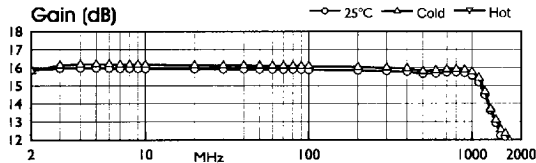
2 - 1000 MHz Standard Hybrid Amplifier

QBH-5819

- **2-1000 MHz bandwidth**
- **Very flat gain response**
- **Unconditionally stable**
- **Wide bandwidth**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	2 - 1000		MHz
Small signal gain	15.5 ± 0.5		dB
Gain vs. temperature	+1.0/-1.0		dB Max
Gain flatness	1.2		dB Max p-p
Reverse isolation	15	15	dB Min
VSWR Input	2.0:1	2.0:1	Max
Output	2.0:1	2.0:1	Max
1 dB compression	+18	+18	dBm Min
Output intercept point			
3rd Order	+30	+29	dBm Min
2nd Order	+42	+38	dBm Min
Noise figure	6.0	7.5	dB Max
DC power @ 15 Vdc ± 1%	84	86	mA Max
Gain vs. Vdc	0.20		dB/Volt Max
Housing	F-PACK .450 SQ SMD (see page P-30 for details)		

HYBRID



Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
2	-21.9	-65.9	15.9	-161.9	-19.2	13.4	-16.3	116.7
10	-31.3	-66.4	15.9	-179.3	-18.9	1.9	-29.5	69.4
100	-32.0	-88.3	15.9	155.5	-18.7	-13.0	-27.1	50.5
200	-27.1	-108.4	15.8	130.8	-18.6	-26.6	-22.1	44.0
400	-22.4	-144.9	15.8	81.5	-18.2	-54.9	-17.3	21.1
600	-18.0	-34.0	15.7	32.6	-17.7	-84.0	-14.8	-8.6
800	-17.4	158.5	15.7	-18.4	-17.0	-116.3	-14.7	-54.9
1000	-15.3	150.4	15.6	-72.4	-16.6	-151.2	-19.7	-122.1

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+16.5 Vdc
Pulse (transient)	+16.5 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Maximum input drive	1.4 VRMS
Thermal rise, junction-to-case	+52°C

H91-5819 0495, Revision B1

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