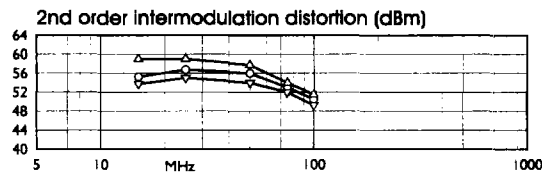
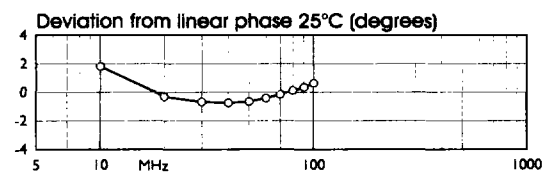
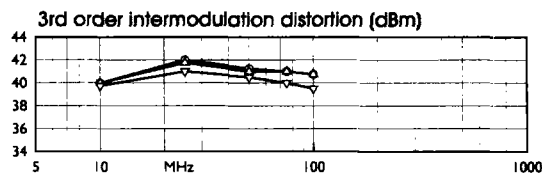
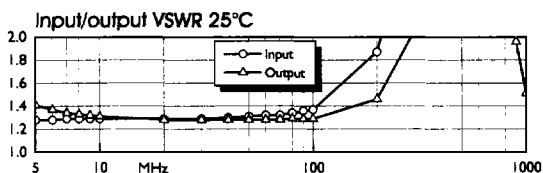
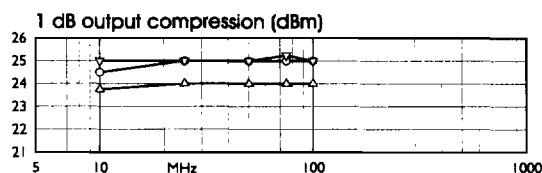
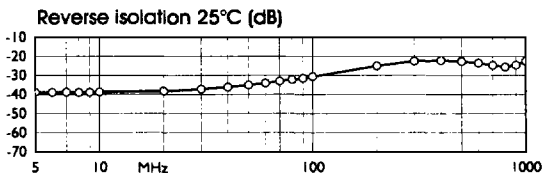
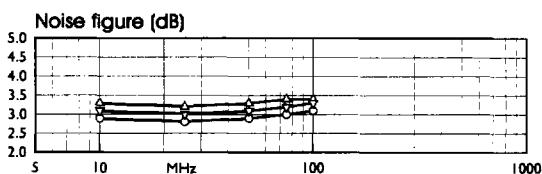
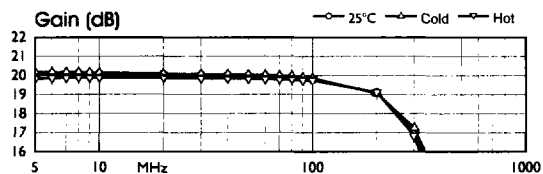


# 10 - 100 MHz Standard Hybrid Amplifier

# QBH-284

- **10-100 MHz bandwidth**
- **Low noise figure**
- **High output power**
- **Guaranteed specifications over temperature**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	10 - 100		MHz
Small signal gain	19.8 ± 0.5		dB
Gain vs. temperature	+0.4/-0.5		dB Max
Gain flatness	0.5	0.6	dB Max p-p
Reverse isolation	27	27	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+24	+23	dBm Min
Output intercept point			
3rd Order	+38	+37	dBm Min
2nd Order	+48	+46	dBm Min
Noise figure	4.0	5.0	dB Max
DC power @ 15 Vdc ± 1%	82	85	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	F-PACK .625 SMD (see page P-22 for details)		



HYBRID

Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
10	-17.9	-165.5	20.1	179.4	-38.8	33.9	-17.5	26.4
20	-17.8	-171.1	20.0	171.8	-38.2	32.3	-18.2	3.5
40	-17.7	-171.6	20.0	160.4	-36.1	37.3	-18.2	-20.1
60	-17.2	-171.2	19.9	149.8	-34.1	40.3	-18.1	-38.5
80	-16.7	-170.2	19.9	139.5	-32.2	40.0	-18.0	-56.3
100	-16.1	-169.6	19.8	129.1	-30.6	37.9	-17.9	-74.3

### ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining .....	+17.0 Vdc
Pulse (transient) .....	+17.0 Vdc
Temperature	
Operating .....	-55 to +125°C
Storage .....	-65 to +150°C
Maximum input drive .....	1.4 VRMS
Thermal rise, junction-to-case .....	+39°C

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