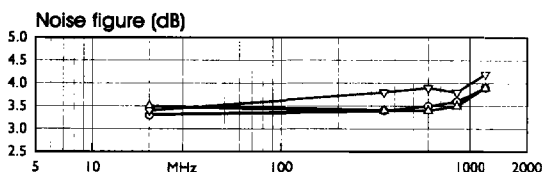
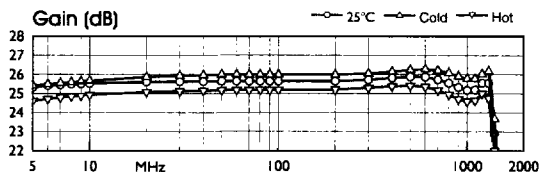


# 20 - 1200 MHz Standard Hybrid Amplifier

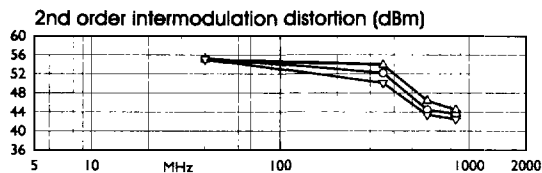
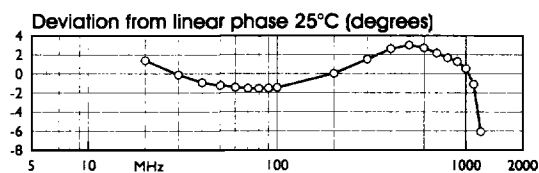
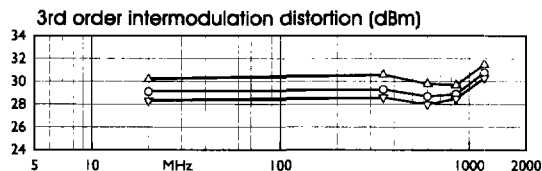
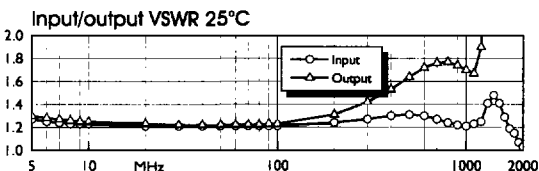
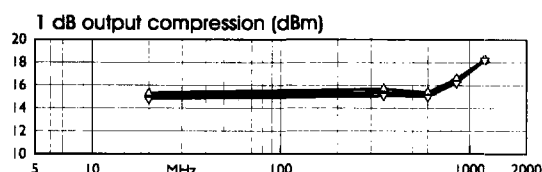
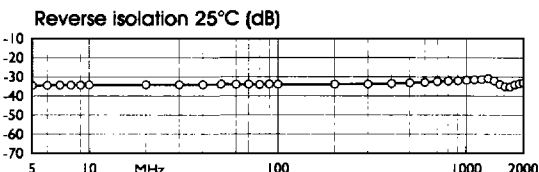
# QBH-128

- **20-1200 MHz bandwidth**
- **Low profile TO-8 package**
- **Excellent intermod performance**
- **High gain, wide bandwidth**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	20 - 1200		MHz
Small signal gain	25.5 ± 0.5		dB
Gain vs. temperature		+1.0/-1.0	dB Max
Gain flatness	1.0	1.0	dB Max p-p
Reverse isolation	28	28	dB Min
VSWR Input	2.0:1	2.0:1	Max
Output	2.0:1	2.0:1	Max
1 dB compression	+13	+13	dBm Min
Output intercept point			
3rd Order	+28	+27	dBm Min
2nd Order	+43	+40	dBm Min
Noise figure	4.5	5.0	dB Max
DC power @ 15 Vdc ± 1%	70	70	mA Max
Gain vs. Vdc	0.00		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
20	-20.4	-174.2	25.6	-0.9	-34.1	4.6	-19.9	178.3
50	-20.6	-177.9	25.6	-13.5	-33.9	-2.6	-20.2	35.6
100	-20.4	107.4	25.6	-30.2	-34.0	-7.7	-19.7	-107.0
200	-19.5	171.6	25.6	-61.8	-33.9	-18.3	-17.5	173.1
400	-17.7	145.5	25.8	-125.3	-33.5	-38.8	-13.6	130.4
600	-17.7	106.9	25.9	168.8	-32.9	-60.7	-11.6	69.2
800	-19.6	69.8	25.5	101.6	-32.1	-86.7	-11.1	-5.0
1000	-20.4	35.0	25.2	34.4	-31.8	-115.3	-11.8	-91.8
1200	-19.1	-17.0	25.6	-38.3	-31.4	-148.5	-10.2	142.9

### ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining .....	+17.0 Vdc
Pulse (transient) .....	+20.0 Vdc
Temperature	
Operating .....	-55 to +100°C
Storage .....	-65 to +150°C
Maximum input drive .....	1.0 VRMS
Thermal rise, junction-to-case .....	+31°C

H91-012B, CA35, Revision A1