

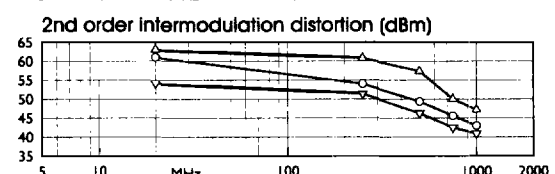
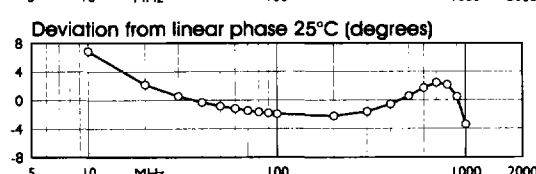
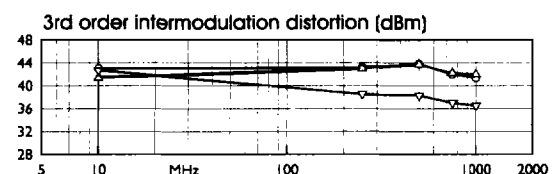
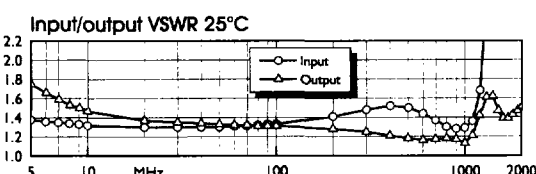
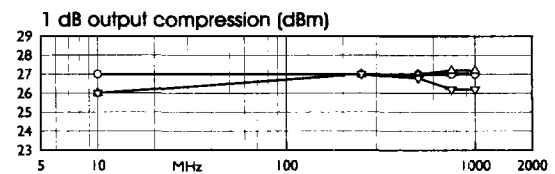
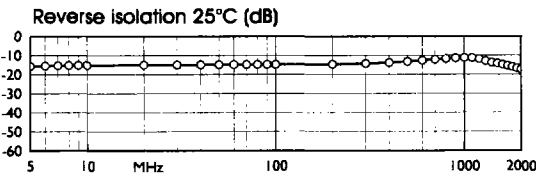
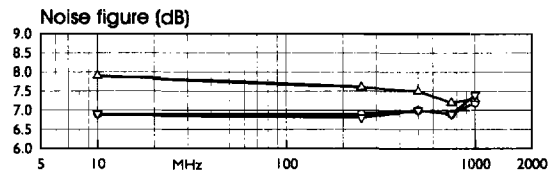
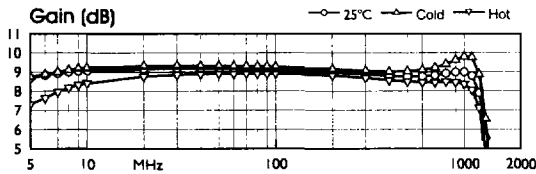
10 - 1000 MHz Standard Hybrid Amplifier

QBH-827

- **10-1000 MHz bandwidth**
- **High intercept point**
- **Low profile TO-8 package**
- **Unconditionally stable**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	10 - 1000		MHz
Small signal gain	9.0 ± 0.5		dB
Gain vs. temperature			dB Max
Gain flatness	1.0	1.0	dB Max p-p
Reverse isolation	10	10	dB Min
VSWR Input	2.0:1	2.0:1	Max
Output	2.0:1	2.0:1	Max
1 dB compression	+27	+26	dBm Min
Output intercept point			
3rd Order	+38	+36	dBm Min
2nd Order	+42	+40	dBm Min
Noise figure	8.0	8.0	dB Max
DC power @ 15 Vdc ± 1%	205	215	mA Max
Gain vs. Vdc			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
10	-17.2	-137.9	9.1	-173.8	-15.1	8.4	-14.4	152.0
20	-17.8	-156.6	9.2	-178.4	-15.0	2.5	-16.1	159.5
50	-17.6	-168.4	9.2	-166.1	-14.9	-4.0	-17.0	163.2
90	-17.1	-172.7	9.1	-152.7	-14.8	-9.7	-17.4	160.5
200	-15.3	175.1	9.0	-118.0	-14.6	-23.6	-18.4	149.3
400	-13.9	138.1	8.8	57.5	-13.8	-50.1	-20.6	128.6
600	-15.0	87.0	8.8	-2.5	-12.7	-81.2	-23.8	67.5
800	-18.2	12.5	8.9	-64.2	-11.7	-117.5	-22.0	52.7
1000	-18.3	-64.3	9.0	-132.0	-11.2	-158.8	-27.2	122.0

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+19.0 Vdc
Pulse (transient)	+19.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Thermal rise, junction-to-case	+70°C

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