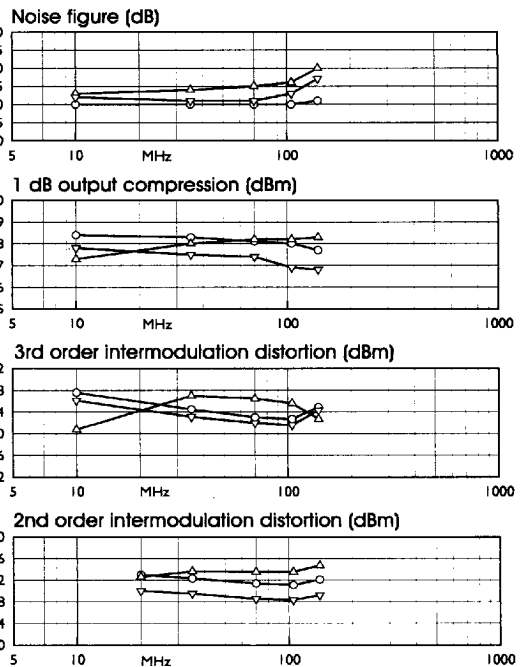
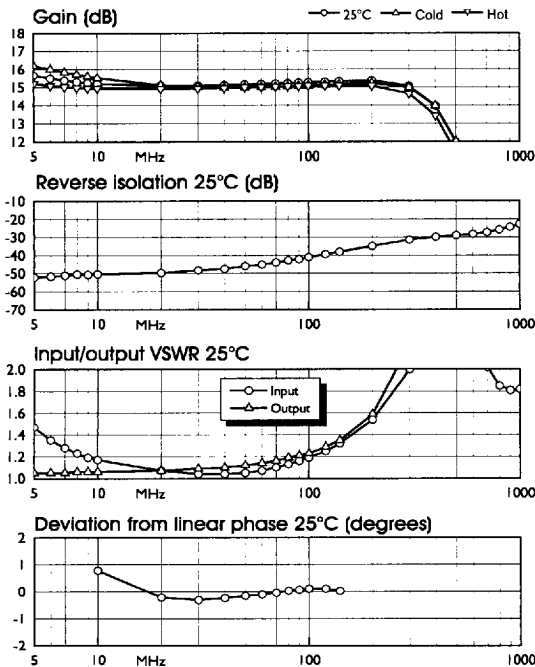


10 - 140 MHz Standard Hybrid Amplifier

QBH-142

- **10-140 MHz bandwidth**
- **Low noise figure**
- **Low power operation**
- **Guaranteed specifications over temperature**
- **Very flat gain response**

Parameters	Specification limit		Units
Temperature	+25	-55 to +100	°C
Frequency range	10 - 140		MHz
Small signal gain	15.3 ± 0.5		dB
Gain vs. temperature		+0.5/-0.7	dB Max
Gain flatness	0.3	0.6	dB Max p-p
Reverse isolation	34	34	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+7	+6	dBm Min
Output intercept point			
3rd Order	+20	+19	dBm Min
2nd Order	+31	+28	dBm Min
Noise figure	2.3	3.0	dB Max
DC power @ 15 Vdc ± 1%	14	15	mA Max
Gain vs. Vdc	0.10		dB/Volt Max
Housing	TO-8 (see page P-14 for details)		



Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
10	-22.2	87.6	15.2	107.1	-50.6	35.5	-31.4	-16.7
20	-29.1	85.1	15.1	174.1	-49.9	35.9	-29.3	-40.9
40	-35.4	22.8	15.1	165.9	-47.6	40.9	-26.3	-68.9
60	-29.8	-78.1	15.2	157.9	-45.1	44.6	-23.7	-86.6
80	-24.7	-88.3	15.2	149.9	-42.8	44.8	-21.5	-100.1
100	-21.6	-97.3	15.3	141.8	-40.9	41.6	-19.6	-111.7
120	-19.3	-105.6	15.3	133.6	-39.4	38.6	-17.9	-122.2
140	-17.5	-113.7	15.3	125.4	-38.1	32.4	-16.5	-131.9

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+20.0 Vdc
Pulse (transient)	+25.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Maximum input drive	1.0 VRMS
Thermal rise, junction-to-case	+14°C

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