

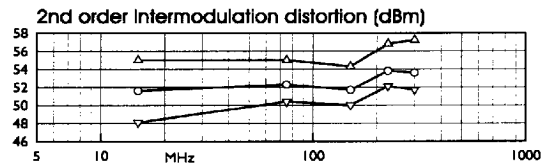
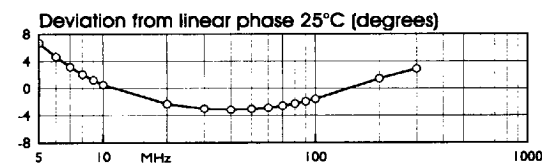
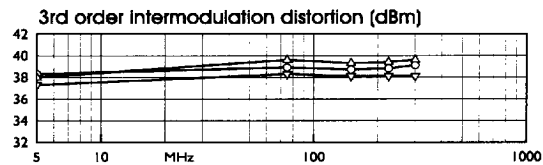
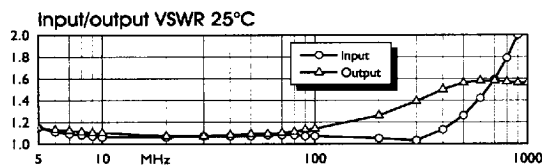
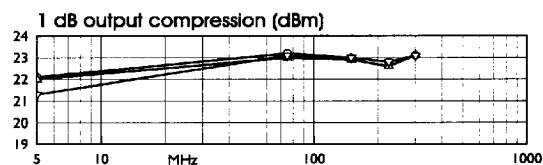
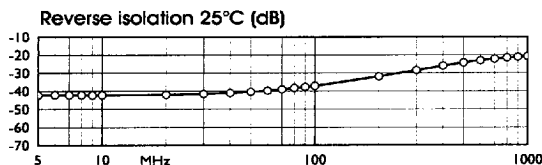
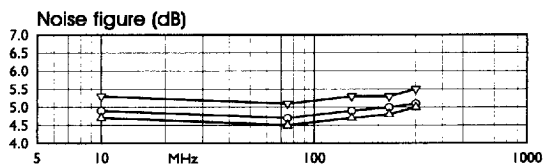
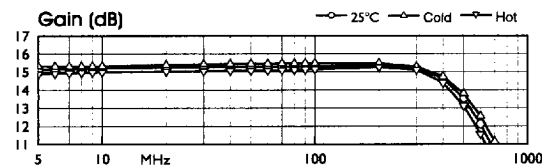
5 - 300 MHz Standard Hybrid Amplifier

QBH-265

- **5-300 MHz bandwidth**
- **High output power**
- **Guaranteed specifications over temperature**
- **High reverse isolation**

Parameters	Specification limit		Units
Temperature	+25	-55 to +85	°C
Frequency range	5 - 300		MHz
Small signal gain	15.0 ± 0.5		dB
Gain vs. temperature		+0.4/-0.5	dB Max
Gain flatness	0.4	0.6	dB Max p-p
Reverse isolation	28	28	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+22	+21	dBm Min
Output intercept point			
3rd Order	+37	+36	dBm Min
2nd Order	+50	+48	dBm Min
Noise figure	5.8	6.4	dB Max
DC power @ 15 Vdc ± 1%	93	95	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
5	-23.4	-80.6	15.1	-168.4	-42.3	25.1	-23.1	112.1
10	-30.6	-53.8	15.2	-176.4	-42.3	16.0	-26.8	98.5
50	-29.0	-14.8	15.3	165.1	-40.4	30.0	-27.8	58.5
100	-29.0	-33.1	15.3	147.9	-37.1	37.3	-24.0	37.1
200	-33.0	-79.0	15.4	113.6	-32.0	30.6	-18.9	-4.8
300	-35.6	124.0	15.2	77.7	-28.5	13.5	-15.8	-49.5

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	2.2 VRMS
Thermal rise, junction-to-case	+41°C

H91-0265-0495, Revision A1

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