

Hybrid Amplifiers Low Noise Figure

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit		Units
Temperature	+25 (Typical)	-40 to +70	°C
Frequency Range	1930 - 1990		MHz
Small Signal Gain	16.0 min		dB
Gain vs. Temperature		+1.5 /	dB Max
Gain Flatness	0.5	0.8	dB Max p-p
Reverse Isolation	26	25	dB Min
VSWR Input	1.4:1	2.0:1	Max
Output	1.4:1	2.0:1	Max
1 dB Compression	+18.5	+16	dBm Min
Output Intercept Point			
3rd Order	+30	+28	dBm Min
2nd Order			dBm Min
Noise Figure	1.5	2.0	dB Max
DC Power @ 12 Vdc ± 1%	85	100	mA Max
Gain vs. Vdc			dB/Volt Max
Housing	Hybrid SM (E52-19422)		

QBH-8709

Absolute Maximum Ratings

Power Supply Voltage	
Sustaining	18.0 Vdc
Pulse (transient)	20.0 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Max Input Drive	1.8 VRMS

Notes:

1. Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

Typical S-Parameter Data

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
1930	-15.1	-46.8	16.3	152.8	-26.3	77.7	-15.3	-39.7
1945	-15.9	-63.8	16.2	147.8	-26.4	73.1	-15.4	-49.9
1960	-16.3	-82.9	16.1	142.7	-26.4	69.7	-15.4	-61.2
1975	-16.0	-102.5	16.0	137.6	-26.5	64.1	-15.4	-73.7
1990	-15.4	-120.3	15.9	132.5	-26.5	60.5	-15.2	-86.6

