

Hybrid Amplifiers Low Noise Figure

Electrical Specifications ⁽¹⁾:

Parameter	Specification Limit	Units
Temperature	+25 (Typical)	°C
Frequency Range	1930 - 1990	MHz
Small Signal Gain	28.0 ± 1.0	dB
Gain vs. Temperature		dB Max
Gain Flatness	0.9	dB Max p-p
Reverse Isolation	40	dB Min
VSWR Input	1.5:1	Max
Output	1.5:1	Max
1 dB Compression	+25	dBm Min
Output Intercept Point		
3rd Order	+37	dBm Min
2nd Order		dBm Min
Noise Figure	1.2	dB Max
DC Power @ 12 Vdc ± 1%	190	mA Max
Gain vs. Vdc		dB/Volt Max
Housing	Hybrid SM (E52-19422)	

QBH-8701

Absolute Maximum Ratings

Power Supply Voltage	
Sustaining	15.5 Vdc
Pulse (transient)	15.5 Vdc
Temperature	
Operating	-55 to +125°C
Storage	-65 to +150°C
Max Input Drive	1.0 VRMS
Thermal Rise, junction-to-case	+58°C

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	-14.1	-17.8	28.1	-65.8	-59.4	-84.0	-15.4	111.5
1940	-14.2	-21.9	28.0	-68.5	-58.7	-12.7	-15.2	109.5
1950	-14.3	-27.5	27.9	-71.0	-55.3	-118.1	-15.3	107.4
1960	-14.5	-33.3	27.9	-73.7	-52.1	-93.2	-15.2	105.0
1970	-14.2	-39.6	27.8	-76.4	-51.6	-83.7	-15.2	104.7
1980	-13.9	-45.7	27.8	-79.0	-52.0	-112.5	-15.0	103.3
1990	-13.6	-53.7	27.7	-81.7	-54.4	-107.8	-14.7	103.2

