

RF Amplifier

Model QBH-8900

Available as

- QBH-8900
- Hybrid SM (E52-19422)

Features

- **High Gain:** 22.0 dB Typical
- **High Power:** +31.5 dBm Typical
- **Operating Temp.:** -40 °C to +70 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL TA = 25°C	MIN/MAX TA = -40°C to +70°C
Frequency	800 - 960 MHz	800 - 960 MHz
Gain (dB)	22.0±0.5	--
Gain vs. Temperature	--	+0.7/-0.7 Max.
Gain Flatness	1.0	--
Reverse Isolation (dB)	-21	--
VSWR	In Out	1.5:1 1.5:1
		1.5:1 Max. 1.5:1 Max.
1 dB Compression (dBm)	+31.5	+31 Min.
Output Intercept Point		
3rd Order	+47	+46 Min.
2nd Order	--	--
Noise Figure (dB)	3.0	3.0 Max.
Power	Vdc mA	+15 370 Max.

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

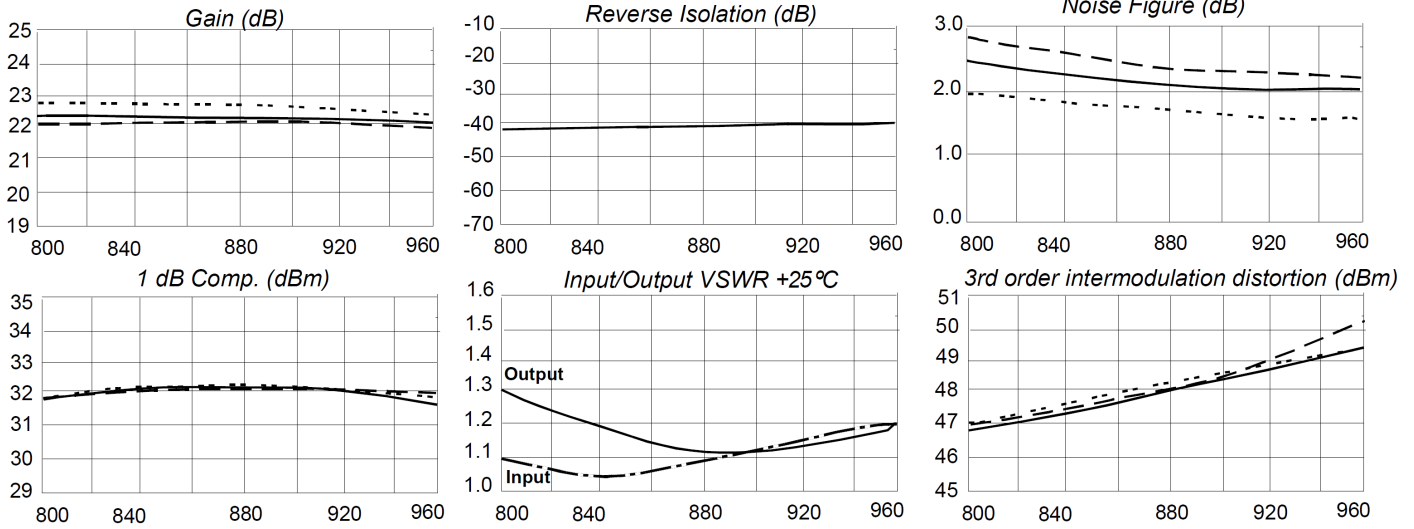
Maximum Ratings

Ambient Operating Temperature	-55°C to +100°C
Storage Temperature	-65°C to +125°C
Case Temperature	+125°C
DC Voltage	+18 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	50 mW (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

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Typical Performance Data



Legend ——— + 25 °C - - - - + 70 °C ······ -40 °C

Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
800	-26.2	-72.8	22.2	101.9	-42.6	29.5	-18.2	-133.0
830	-31.6	-36.8	22.2	89.0	-42.4	26.0	-20.5	-134.5
850	-38.1	-12.4	22.2	80.6	-42.4	23.6	-22.2	-133.3
870	-30.6	-7.6	22.2	72.4	-41.2	22.4	-23.6	-129.1
890	-26.6	-4.7	22.2	64.4	-41.8	18.8	-24.6	-120.8
910	-24.4	-7.1	22.1	56.5	-41.5	17.9	-24.6	-107.0
930	-22.7	-11.1	22.0	48.8	-41.3	15.9	-24.0	-90.7
950	-21.5	-15.8	22.0	41.2	-41.1	13.0	-22.8	-75.7
960	-21.1	-19.5	22.9	37.4	-40.7	11.7	-22.1	-70.0