

RF Amplifier

Model QBH-8920

Available as

- QBH-8920
- Hybrid SM (E52-19422)

Features

- **High Gain:** 17.5 dB Typical
- **High Power:** +29 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)	17.5±0.5	--
Gain vs. Temperature	--	--
Gain Flatness	0.5	0.5 Max.
Reverse Isolation (dB)	22	22 Min.
VSWR	In 1.3:1 Out 1.3:1	1.5:1 Max. 1.5:1 Max.
1 dB Compression (dBm)	+29	+28 Max.
Output Intercept Point		
3rd Order	+45	+44 Min.
2nd Order	--	--
Noise Figure (dB)	2.5	3.0 Max.
Power	Vdc +9 mA 330	+9 350 Max.

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

Absolute Maximum Ratings

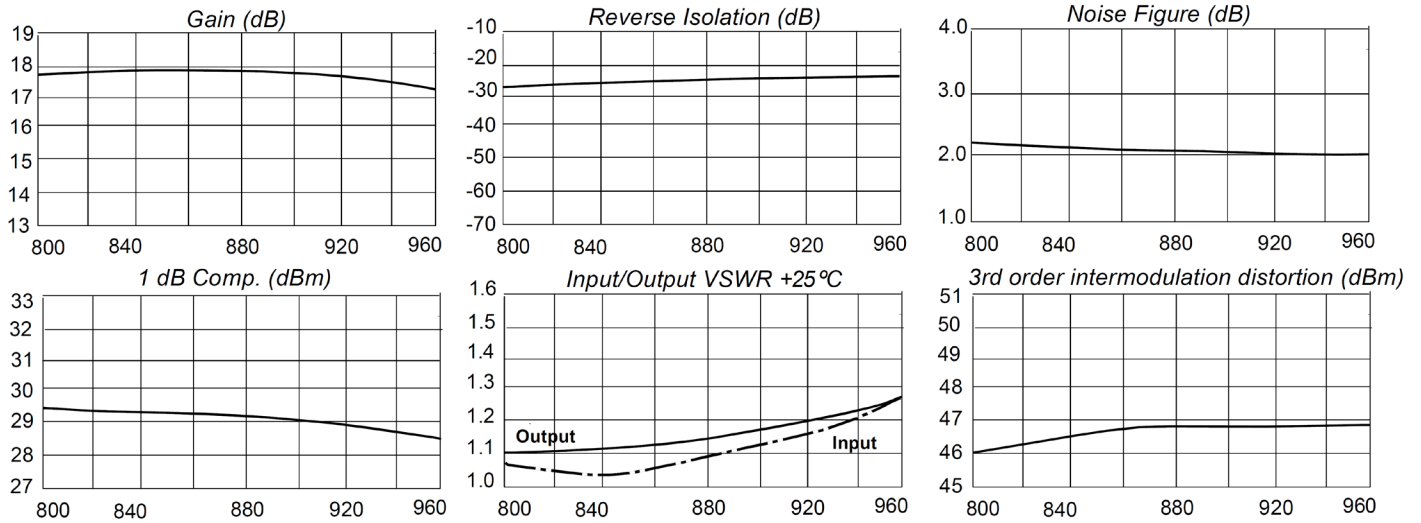
Ambient Operating Temperature	-55°C to +125°C
Storage Temperature	-65°C to +150°C
Case Temperature	+125°C
DC Voltage	+11 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	50 mW (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.

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Typical Performance Data



Legend ——— + 25 °C

Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
800	-32.5	31.2	17.7	96.4	-25.3	48.7	-28.0	73.6
840	-34.8	65.0	17.8	80.6	-24.6	36.9	-25.7	71.0
880	-28.6	85.3	17.8	65.1	-24.0	25.2	-23.2	67.8
920	-22.7	91.0	17.6	49.9	-23.4	13.8	-20.8	63.1
960	-19.0	88.2	17.4	35.1	-23.0	2.5	-18.7	57.1