

RF AMPLIFIER

MODEL QBH-8919

Available as: QBH-8919, Hybrid SM (E52-19422)

Features

- High Gain: 8.5 dB Typical
- High Power: +24 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 - 900 MHz	800 - 900 MHz
Gain (dB)	8.5 ± 0.5	—
Gain vs. Temperature	—	—
Gain Flatness	—	—
Reverse Isolation (dB)	-13	-11 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+24	—
Output Intercept point 3rd Order	+40.5	+39 Min.
2nd Order	—	—
Noise Figure (dB)	3.5	3.8 Max.
Power Vdc	+15	+15
mA	150	150 Max.

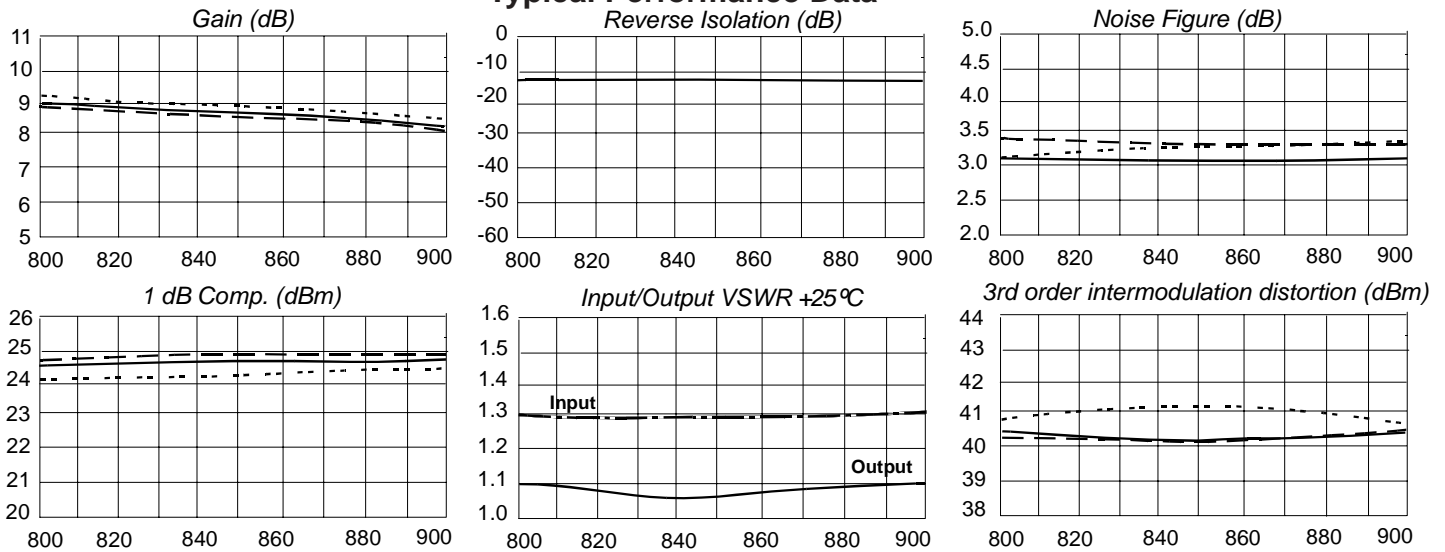
Maximum Ratings

Ambient Operating Temperature -40 °C to +70 °C
 Storage Temperature -65 °C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Note:

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

Typical Performance Data



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

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
800	-17.7 86.3	9.0 88.6	-13.8 82.7	-25.4 -46.7
820	-18.0 86.0	9.8 79.5	-13.5 74.8	-28.4 -69.6
840	-18.0 85.0	8.7 70.7	-13.3 67.1	-34.5 -96.9
860	-17.9 83.6	8.5 62.3	-13.1 59.7	-30.0 -127.9
880	-17.6 81.4	8.4 54.1	-12.9 52.5	-27.4 -156.9
900	-17.4 78.6	8.2 46.1	-12.7 45.4	-25.6 -179.7



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