

# 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.

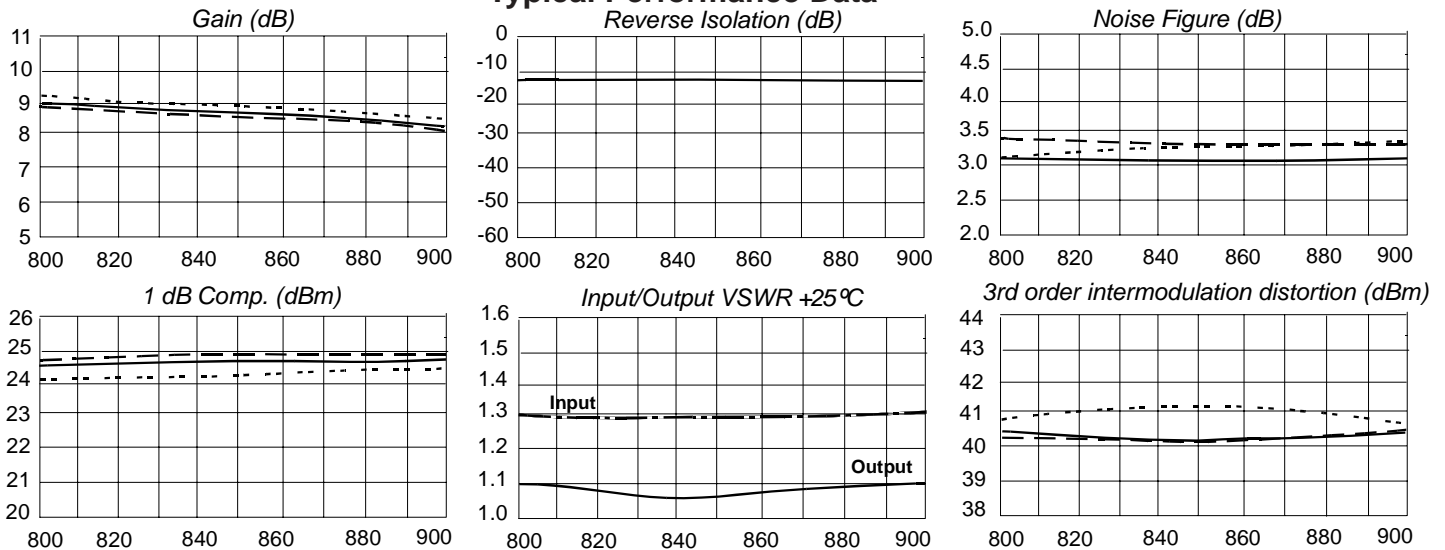
### Maximum Ratings

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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 03/11/05

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001