

RF AMPLIFIER

Available as: QBH-8916, Hybrid SM (E52-19422)

MODEL QBH-8916

Features

- High Gain: 9.5 dB Typical
- High Power: +25 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	1800 - 2500 MHz	1800 - 2500 MHz
Gain (dB)	9.5 Min.	—
Gain vs. Temperature	—	+1.5 Max.
Gain Flatness	0.3	1.0 Max.
Reverse Isolation (dB)	-18	-17 Min.
VSWR In	1.4:1	2.0:1 Max.
VSWR Out	1.4:1	2.0:1 Max.
1 dB Compression (dBm)	+25	+24 Min.
Output Intercept point 3rd Order	+40	+38 Min.
2nd Order	—	—
Noise Figure (dB)	3.7	5.0 Max.
Power Vdc	+12	+12
mA	215	230 Max.

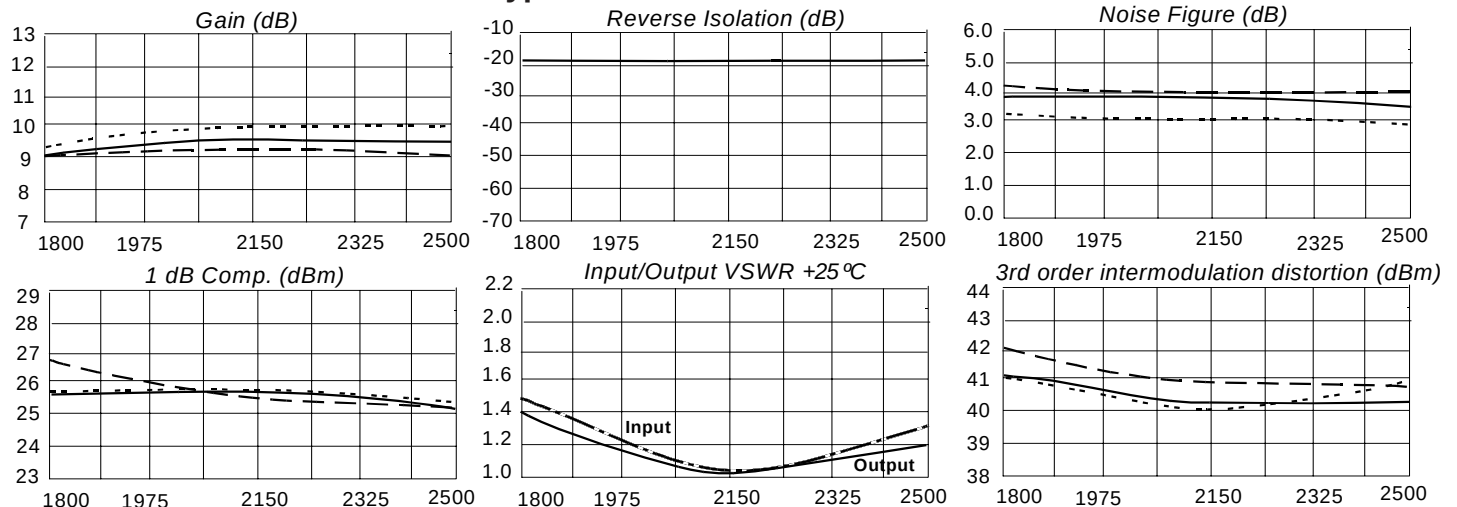
Maximum Ratings

Ambient Operating Temperature -55 °C to +125 °C
Storage Temperature -65 °C to + 150 °C
Case Temperature + 125 °C
DC Voltage + 18 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



Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
1800	-14.2 -0.2	9.3 -111.0	-18.5 120.9	-16.1 -67.0
1950	-17.1 -17.0	9.5 -140.1	-18.5 98.8	-20.6 -94.6
2050	-20.1 -24.7	9.6 -160.0	-18.4 83.4	-25.2 -118.0
2100	-22.4 -26.4	9.6 -170.1	-18.4 75.8	-29.1 -135.1
2200	-28.7 -17.8	9.6 169.3	-18.3 59.9	-34.4 149.1
2300	-27.0 12.8	9.6 148.0	-18.3 43.4	-29.3 62.7
2350	-23.8 22.6	9.6 137.2	-18.3 34.8	-25.7 46.7
2450	-19.2 19.7	9.5 115.1	-18.3 17.5	-21.7 22.3
2500	-17.6 13.3	9.4 103.7	-18.2 8.4	-20.2 12.6



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