

RF AMPLIFIER

MODEL QBH-5819

Available as: QBH-5819, F-Pack (E52-18563)

Features

- High Gain: 15.5 dB Typical
- High Power: +18 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	2 - 1000 MHz	2 - 1000 MHz
Gain (dB)	15.5 ± 0.5	—
Gain vs. Temperature	—	+1.0/-1.0 Max.
Gain Flatness	0.8	1.2 Max.
Reverse Isolation (dB)	-15	-15 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+18	+18 Min.
Output Intercept point		
3rd Order	+30	+29 Min.
2nd Order	+42	+38 Min.
Noise Figure (dB)	6.0	7.5 Max.
Power Vdc	+15	+15
mA	84	86 Max.

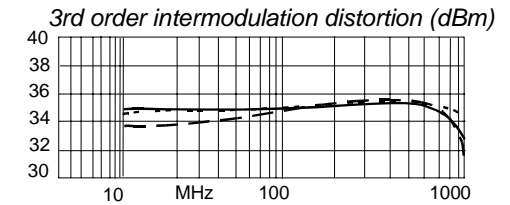
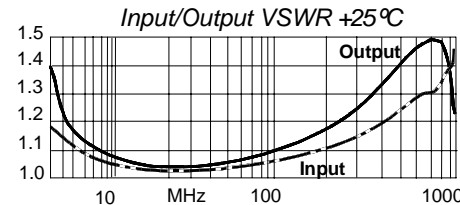
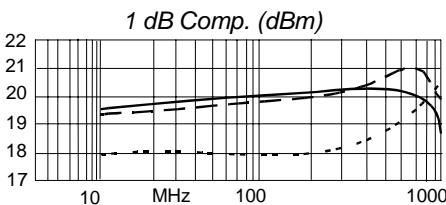
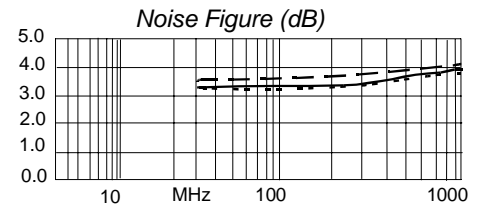
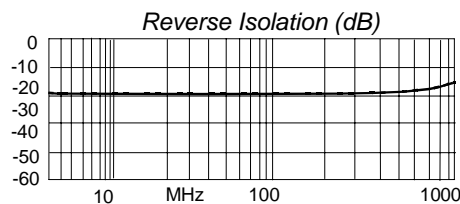
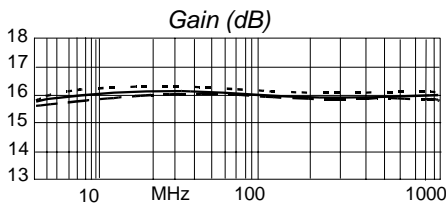
Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 16.5 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 - - - - + 85 °C ······ -55 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
2	-21.9 -66.0	15.9 -162.1	-19.2 13.3	-16.3 116.6
7	-29.1 -65.3	15.9 -177.0	-18.9 3.6	-27.2 75.8
10	-31.3 -65.1	15.9 -179.3	-18.9 2.1	-29.5 67.3
40	-35.2 -66.9	15.9 170.7	-18.8 -4.4	-31.1 48.3
70	-33.9 -77.4	15.9 163.0	-18.8 -9.0	-29.0 48.9
100	-32.0 -84.9	15.9 155.3	-18.7 -13.3	-27.1 49.2
400	-22.4 -139.4	15.8 80.7	-18.2 -56.4	-17.3 20.5
700	-17.6 170.6	15.7 6.5	-17.3 -101.8	-14.4 -33.9
1000	-15.3 154.0	15.6 -75.3	-16.6 -155.3	-19.7 -145.7



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