

RF AMPLIFIER

MODEL QBH-5407

Available as: QBH-5407, F-Pack (E52-18563)

Features

- High Gain: 10.0 dB Typical
- High Power: +26 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	50 - 2000 MHz	50 - 2000 MHz
Gain (dB)	10.0 ± 1.0	—
Gain vs. Temperature	—	+1.0/-1.0 Max.
Gain Flatness	2.0	2.0 Max.
Reverse Isolation (dB)	-20	-20 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+26	+26 Min.
Output Intercept point 3rd Order	+38	+36 Min.
2nd Order	+46	+45 Min.
Noise Figure (dB)	6.0	7.0 Max.
Power Vdc	+15	+15
mA	225	225 Max.

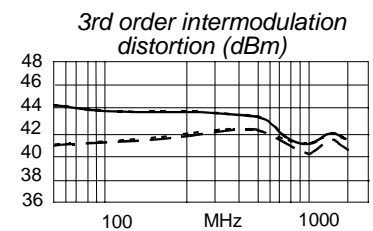
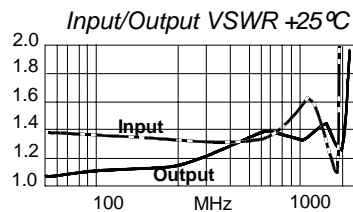
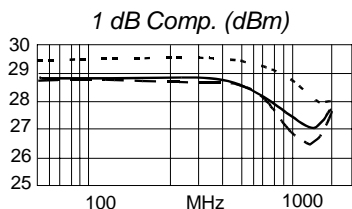
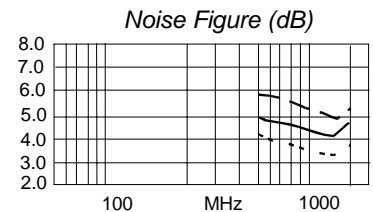
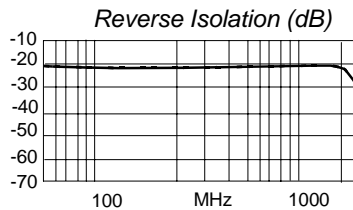
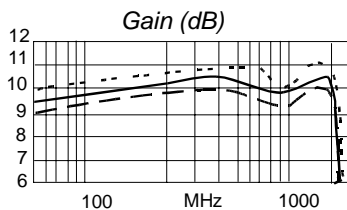
Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 17 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.
2. Noise Figures increase below 500 NHz

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
50	-17.3 -151.5	9.6 -176.9	-22.3 -4.3	-25.8 -100.2
90	-17.6 -167.3	9.8 170.0	-22.5 -13.3	-24.5 -127.2
300	-17.9 162.4	10.2 121.8	-22.7 -49.3	-21.1 -178.6
600	-17.8 152.5	10.3 55.5	-22.8 -101.4	-17.3 135.3
900	-14.1 127.4	9.9 -1.6	-23.5 -146.0	-15.2 63.9
1200	-12.2 89.5	10.4 -67.3	-23.3 162.2	-16.9 47.7
1500	-13.1 46.5	10.5 -134.8	-23.3 109.4	-15.0 9.2
1800	-30.5 3.9	10.6 153.1	-23.1 52.6	-15.8 -58.1
2000	-12.4 122.5	10.2 96.9	-23.0 8.1	-17.5 -130.2



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