

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.

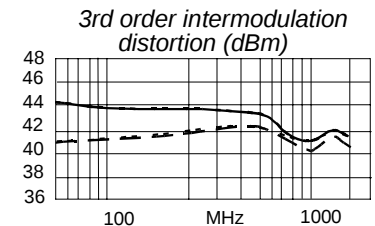
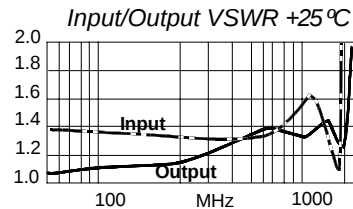
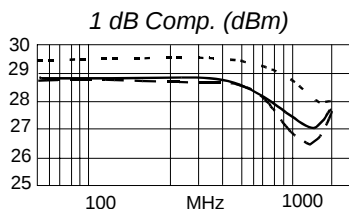
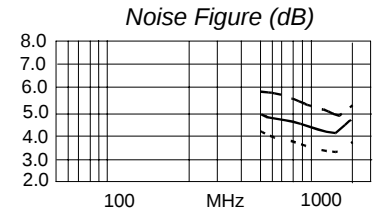
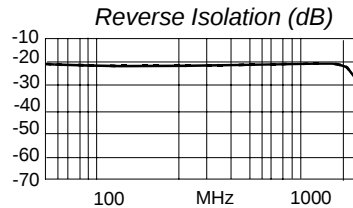
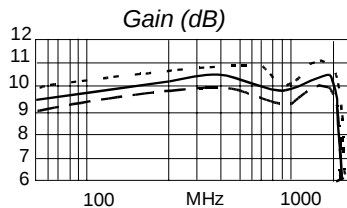
Maximum Ratings

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 --		-- S21 --		-- S12 --		-- S22 --	
	dB	Ang	dB	Ang	dB	Ang	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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