

RF AMPLIFIER

MODEL QBH-5847

Available as: QBH-5847, F-Pack (E52-18563)

Features

- High Gain: 9.0 dB Typical
- High Power: +10 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	30 - 1000 MHz	30 - 1000 MHz
Gain (dB)	9.0 ± 1.0	—
Gain vs. Temperature	—	+0.8/-1.2 Max.
Gain Flatness	2.0	2.0 Max.
Reverse Isolation (dB)	-22	-22 Min.
VSWR In	1.8:1	2.0:1 Max.
VSWR Out	1.8:1	2.0:1 Max.
1 dB Compression (dBm)	+10	+9 Min.
Output Intercept point		
3rd Order	+23	+22 Min.
2nd Order	+33	+30 Min.
Noise Figure (dB)	4.8	5.5 Max.
Power Vdc	+15	+15
mA	27	29 Max.

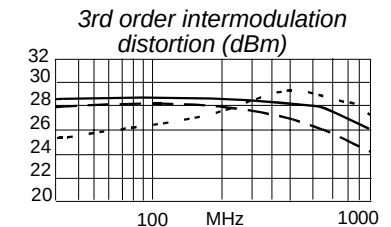
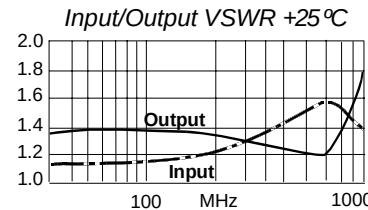
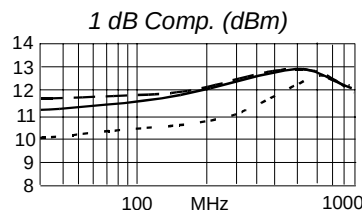
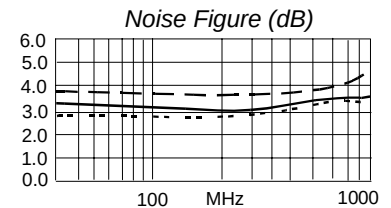
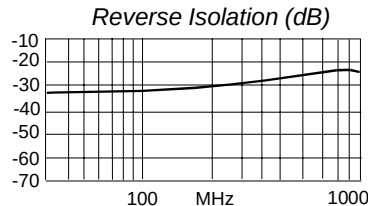
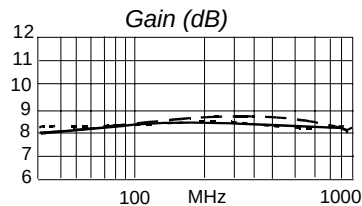
Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 19 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
30	-24.8 57.9	8.0 178.6	-34.6 17.9	-16.5 -1.4
60	-24.4 21.9	8.1 167.9	-34.0 12.1	-16.2 -7.7
80	-23.8 4.6	8.2 161.7	-33.8 10.0	-16.2 -11.7
100	-23.2 -9.8	8.2 155.7	-33.4 7.8	-16.2 -15.4
300	-17.5 -102.6	8.4 98.5	-29.8 -8.9	-17.1 -54.7
500	-13.9 -173.4	8.4 41.8	-26.7 -41.2	-19.5 -107.9
700	-13.0 115.6	8.4 -15.3	-24.5 -83.4	-20.2 169.9
900	-14.9 29.9	8.3 -73.3	-23.5 -137.0	-14.4 90.9
1000	-16.5 -27.0	8.3 -103.5	-23.6 -170.5	-11.5 58.5



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