

RF AMPLIFIER

Available as: QBH-5866, F-Pack (E52-18563)

MODEL QBH-5866

Features

- High Gain: 27.5 dB Typical
- High Power: +13.5 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	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	27.5 ± 1.0	—
Gain vs. Temperature	—	+1.5/-1.5 Max.
Gain Flatness	1.6	1.6 Max.
Reverse Isolation (dB)	-38	-38 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+13.5	+12.5 Min.
Output Intercept point		
3rd Order	+26	+24 Min.
2nd Order	+38	+36 Min.
Noise Figure (dB)	6.0	6.5 Max.
Power Vdc	+15	+15
mA	85	87 Max.

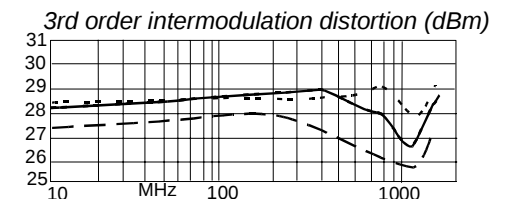
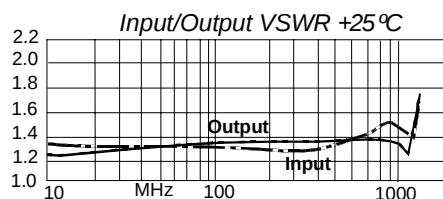
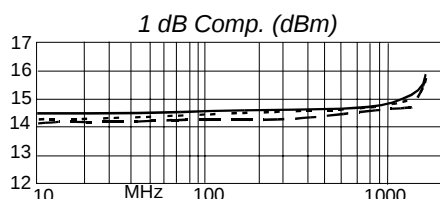
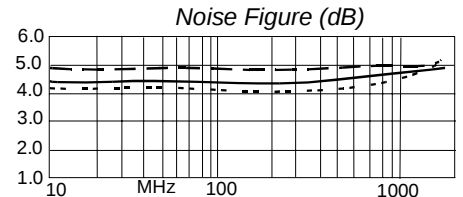
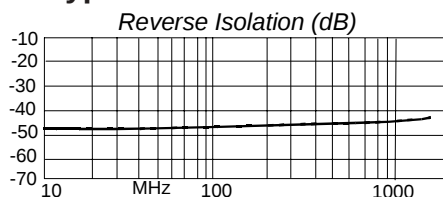
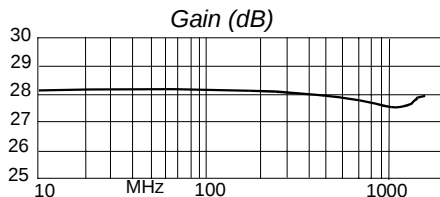
Maximum Ratings

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.

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
10	-17.2 -2.8	28.1 -173.6	-46.1 13.3	-18.5 18.6
100	-17.6 -33.2	28.2 141.5	-46.1 -1.5	-16.7 -23.1
300	-19.2 -109.2	28.0 63.5	-45.0 -31.5	-16.8 -81.9
500	-18.9 170.6	27.8 -13.3	-44.9 -60.3	-16.5 -144.0
700	-16.2 105.0	27.6 -89.9	-44.2 -82.9	-15.9 160.4
900	-14.5 58.0	27.4 -166.4	-43.8 -116.6	-16.5 110.8
1100	-14.9 23.9	27.4 116.8	-43.9 -140.9	-18.2 94.4
1300	-15.7 5.2	27.7 36.3	-43.1 -168.6	-15.4 86.7
1500	-12.0 -1.4	27.7 -51.6	-42.9 162.9	-11.4 39.6



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