

RF AMPLIFIER

Available as: QBH-237, F-Pack (E52-5006)

MODEL QBH-237

Features

- High Gain: 12.5 dB Typical
- High Power: +20 dBm Typical
- Operating Temp. - 54 °C to +85 °C
- Environmental Screening Available

Specifications

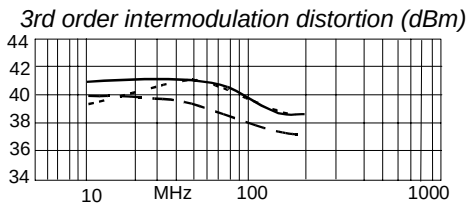
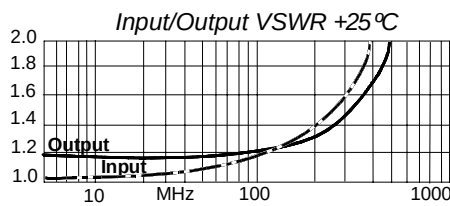
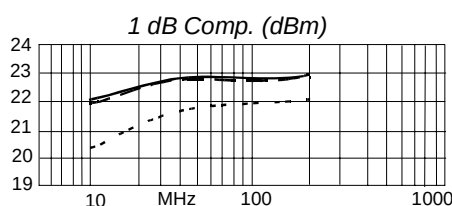
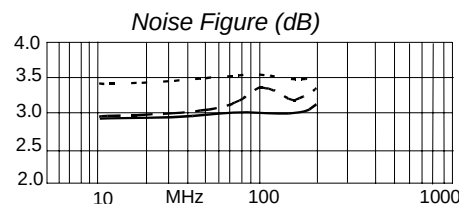
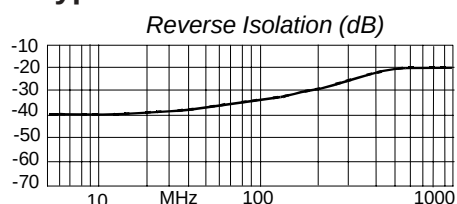
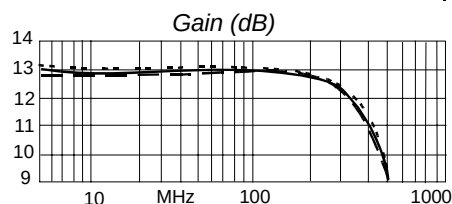
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -54 °C to +85 °C
Frequency	10 - 200 MHz	10 - 200 MHz
Gain (dB)	12.5 ± 0.5	—
Gain vs. Temperature	—	+0.5/-0.5 Max.
Gain Flatness	1.0	1.0 Max.
Reverse Isolation (dB)	-25	-25 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+20	+19 Min.
Output Intercept point 3rd Order	+38	+36 Min.
2nd Order	+50	+48 Min.
Noise Figure (dB)	3.5	3.8 Max.
Power Vdc	+15	+15
mA	94	97 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to + 125 °C
Storage Temperature -65°C to + 150 °C
Case Temperature + 125 °C
DC Voltage + 20 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: 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 - - - - - - - - - -54 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
10	-32.4 178.5	12.9 178.8	-39.0 26.4	-22.5 9.0
30	-35.2 -142.1	12.9 168.1	-37.8 23.6	-22.4 -16.5
50	-30.9 -122.6	12.9 158.9	-36.5 26.8	-21.9 -32.5
70	-26.9 -123.5	12.9 149.9	-35.1 27.7	-21.4 -47.1
80	-25.4 -126.4	12.9 145.5	-34.4 27.3	-21.2 -54.2
90	-24.1 -128.7	12.9 141.1	-33.8 27.2	-20.9 -61.4
125	-20.8 -141.3	12.9 125.4	-31.6 21.8	-19.9 -84.0
175	-17.3 -163.8	12.8 102.8	-29.2 10.7	-18.4 -115.6
200	-16.0 -175.1	12.8 91.4	-28.2 4.1	-17.5 -130.8



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