

RF AMPLIFIER

MODEL QBH-136

Available as: QBH-136, 4 Pin TO-8 Tall (080-22502-0001)
 QBH-9-136, Connectorized Housing (ES E52-1501)

Features

- High Gain: 20.0 dB Typical
- High Power: +21 dBm Typical
- Operating Temp. -40 °C to +85 °C
- Environmental Screening Available

Maximum Ratings

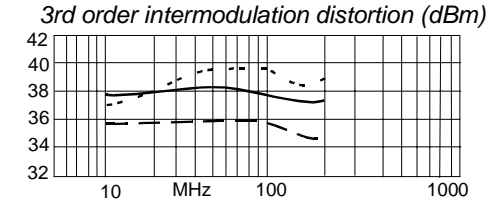
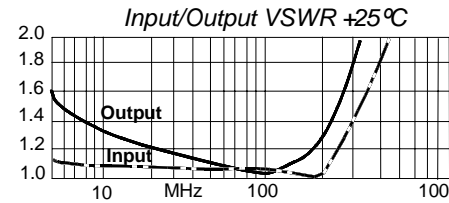
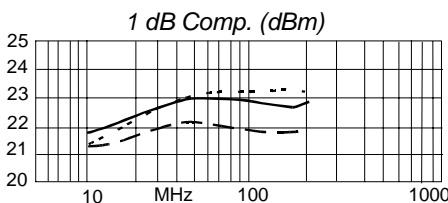
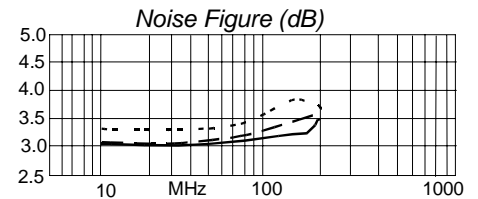
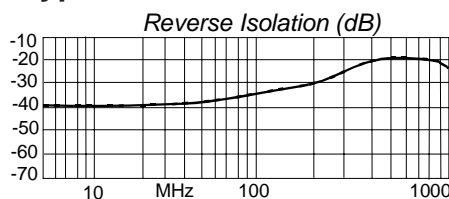
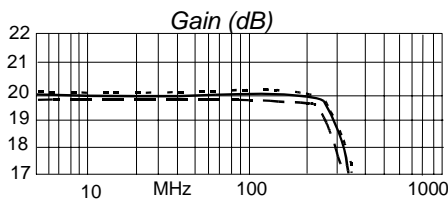
Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -65°C to +150 °C
 Case Temperature +125 °C
 DC Voltage +17 Volts
 Continuous RF Input Power +13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -40 °C to +85 °C
Frequency	10 - 200 MHz	10 - 200 MHz
Gain (dB)	20.0 ± 0.5	—
Gain vs. Temperature	—	+0.5/-1.3 Max.
Gain Flatness	0.5	1.0 Max.
Reverse Isolation (dB)	-26	-25 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
1 dB Compression (dBm)	+21	+19 Min.
Output Intercept point		
3rd Order	+33	+30 Min.
2nd Order	+42	+37 Min.
Noise Figure (dB)	4.5	4.9 Max.
Power Vdc	+15	+15
mA	70	70 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 ······ -40 °C

Linear S-Parameters Data

FREQ. MHz	-- S11 --		-- S21 --		-- S12 --		-- S22 --	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
10	-30.2	-125.4	20.0	-177.6	-39.1	32.3	-16.8	130.3
40	-30.9	161.0	20.1	163.7	-37.3	28.2	-22.8	137.7
50	-30.0	142.0	20.1	158.8	-36.7	29.9	-23.8	137.7
60	-29.5	128.9	20.1	154.0	-36.0	30.9	-24.9	136.6
70	-29.0	120.8	20.0	149.2	-35.5	30.6	-26.1	136.8
80	-28.4	109.4	20.1	144.5	-34.8	32.3	-27.5	136.0
90	-28.3	99.0	20.1	139.8	-34.1	34.0	-29.4	136.2
100	-28.2	89.3	20.1	135.1	-33.6	35.1	-31.7	141.7
200	-35.8	-172.4	20.0	86.1	-28.4	24.6	-19.2	-121.4



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