

RF AMPLIFIER

MODEL QBH-152

Available as: QBH-152, 4 Pin TO-8 (T4)
 QBH-9-152, Connectorized Housing (ES E52-1501)

Features

- High Gain: 17.0 dB Typical
- High Power: +18 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Maximum Ratings

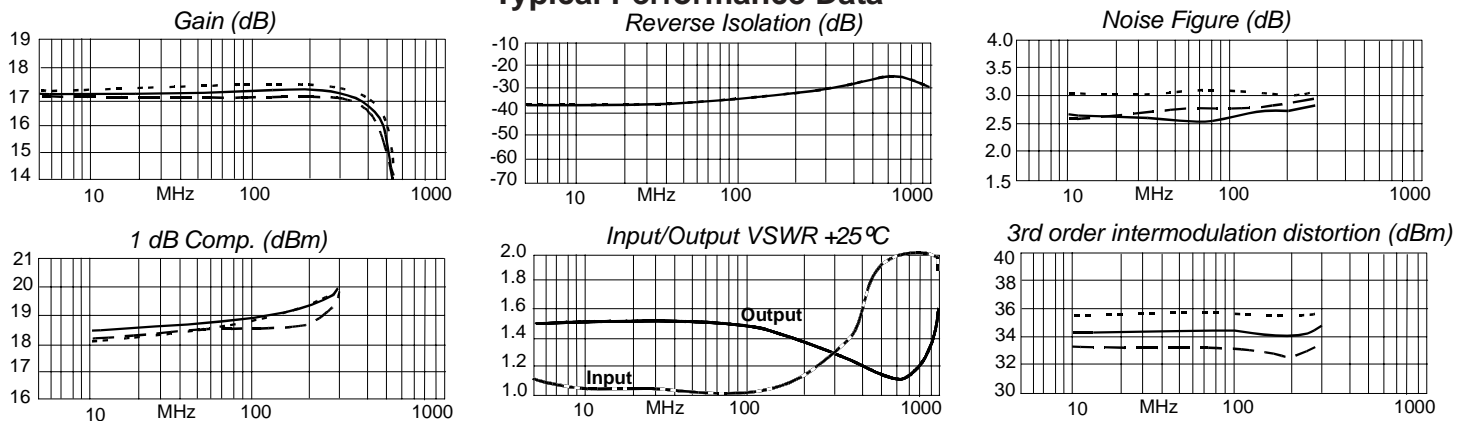
Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 16 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	10 - 300 MHz	10 - 300 MHz
Gain (dB)	17.0 ± 0.6	—
Gain vs. Temperature	—	+1.0/-1.0 Max.
Gain Flatness	0.6	0.8 Max.
Reverse Isolation (dB)	-26	-26 Min.
VSWR In	1.5:1	1.6:1 Max.
Out	1.6:1	1.6:1 Max.
1 dB Compression (dBm)	+18	+17 Min.
Output Intercept point		
3rd Order	+33	+30 Min.
2nd Order	+46	+42 Min.
Noise Figure (dB)	3.9	4.6 Max.
Power Vdc	+15	+15
mA	79	82 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 ······ -55 °C

Linear S-Parameters Data

FREQ. MHz	-- S11-- dB	Ang	-- S21-- dB	Ang	-- S12-- dB	Ang	-- S22-- dB	Ang
10	-29.9	144.4	17.4	178.3	-35.2	8.1	-14.0	174.9
40	-34.3	119.8	17.4	166.7	-34.6	6.3	-13.9	166.2
50	-34.6	111.4	17.4	163.2	-34.6	5.9	-14.0	163.0
60	-35.3	100.5	17.4	159.7	-34.2	6.6	-14.0	159.7
80	-35.4	67.9	17.4	152.7	-34.1	6.4	-14.2	153.0
90	-35.0	47.2	17.4	149.2	-33.9	7.0	-14.3	149.8
100	-34.5	27.1	17.4	145.7	-33.6	7.0	-14.3	146.4
200	-24.9	-75.8	17.4	110.6	-31.5	1.2	-15.4	113.6
300	-18.3	-132.1	17.4	73.5	-29.8	-11.2	-17.5	80.4



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