

RF AMPLIFIER

MODEL QBH-155

Available as: QBH-155, 4 Pin TO-8 (T4)
 QBH-9-155, Connectorized Housing (ES E52-1501)

Features

- High Gain: 15.0 dB Typical
- High Power: +22 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Maximum Ratings

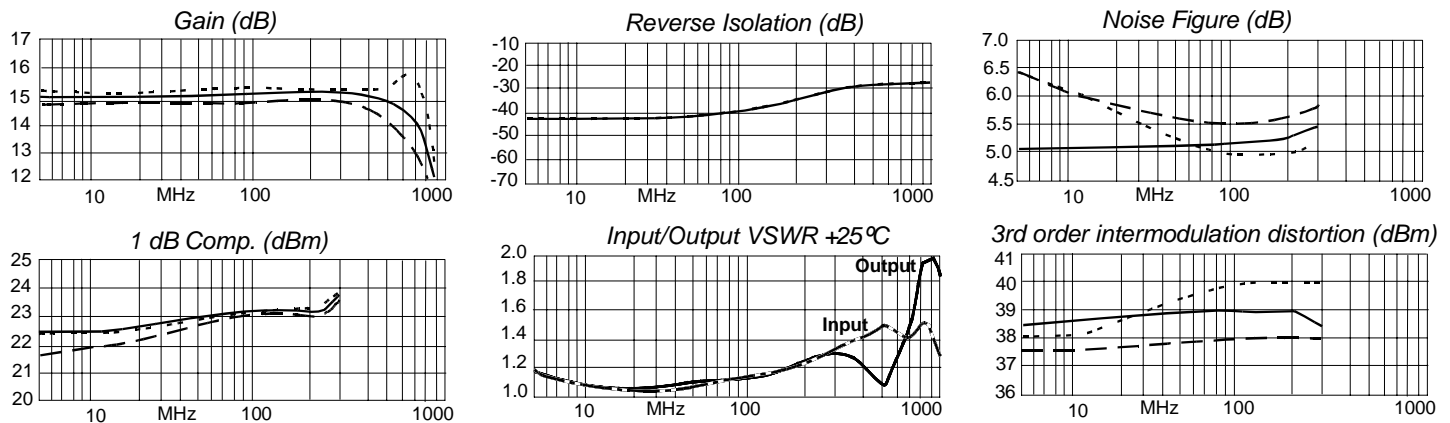
Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 17 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta = 25 °C	Ta = -55 °C to +85 °C
Frequency	5 - 300 MHz	5 - 300 MHz
Gain (dB)	15.0 ± 0.5	—
Gain vs. Temperature	—	+0.4/-0.5 Max.
Gain Flatness	0.4	0.6 Max.
Reverse Isolation (dB)	-26	-26 Min.
VSWR In	1.5:1	1.5:1 Max.
Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+22	+21 Min.
Output Intercept point		
3rd Order	+37	+36 Min.
2nd Order	+50	+48 Min.
Noise Figure (dB)	6.2	6.5 Max.
Power Vdc	+15	+15
mA	93	95 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
5	-24.6	-101.6	15.2	-167.1	-43.4	20.8	-24.3	118.8
9	-31.3	-89.9	15.3	-175.0	-43.5	18.4	-27.1	107.5
20	-33.4	-51.5	15.3	176.4	-43.2	20.6	-29.0	88.8
40	-29.5	-58.0	15.3	167.1	-42.3	26.7	-27.8	72.1
70	-25.5	-76.4	15.3	155.1	-40.2	39.0	-25.0	56.7
90	-23.6	-87.0	15.3	147.5	-38.8	39.0	-23.5	48.5
110	-22.2	-96.1	15.3	139.9	-37.3	38.0	-22.2	40.8
150	-20.0	-112.2	15.3	125.1	-35.2	34.1	-20.2	25.6
300	-15.5	-171.1	15.2	69.7	-29.7	4.8	-18.4	-29.1



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