

RF AMPLIFIER

Available as: QBH-4002, 4 Pin TO-8 (T4)
 QBH-9-4002, Connectorized Housing (ES E52-1501)

MODEL QBH-4002

Features

- High Gain: 11.0 dB Typical
- High Power: +12 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

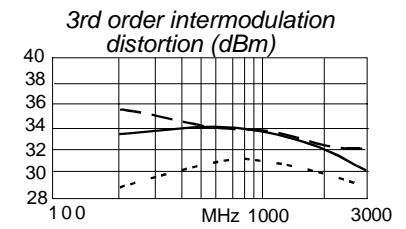
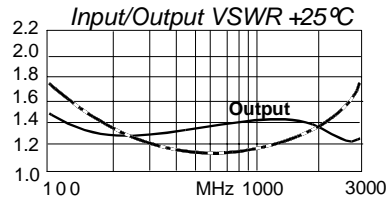
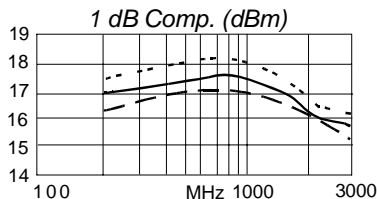
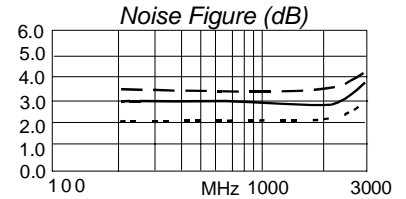
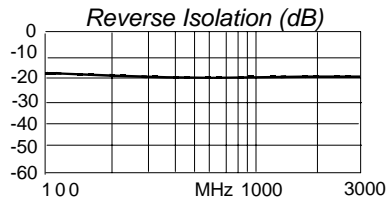
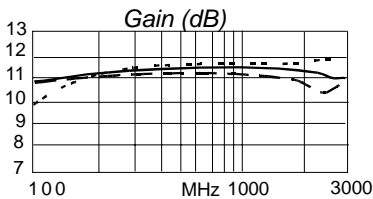
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	200 - 3000 MHz	200 - 3000 MHz
Gain (dB)	11.0 ± 0.8	—
Gain vs. Temperature	—	+1.2/-1.2 Max.
Gain Flatness	1.3	1.8 Max.
Reverse Isolation (dB)	-17	-15 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+12	+11 Min.
Output Intercept point 3rd Order	+24	+22 Min.
2nd Order	+30	+28 Min.
Noise Figure (dB)	4.0	4.5 Max.
Power Vdc	+15	+15
mA	75	80 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to +125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 18 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 - - - - - - - -55 °C

Linear S-Parameters Data

FREQ. MHz	-- S11 --		-- S21 --		-- S12 --		-- S22 --	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
200	-16.9	-70.7	11.3	162.1	-20.1	-36.8	-17.4	-146.0
600	-25.7	-59.4	11.5	96.2	-21.1	-81.9	-17.4	100.4
1000	-21.5	-72.8	11.4	36.7	-21.3	-132.0	-15.8	35.3
1300	-19.5	-107.7	11.3	-7.3	-21.4	-171.3	-15.1	-6.5
1700	-17.4	-171.4	11.3	-65.9	-21.3	135.6	-15.5	-58.4
2000	-16.1	136.1	11.2	-110.0	-21.2	94.1	-16.4	-97.8
2400	-14.1	62.6	10.9	-168.5	-21.0	37.0	-18.5	-147.7
2700	-12.9	5.5	10.8	149.0	-21.0	-7.2	-18.8	177.4
3000	-11.6	-50.5	10.9	104.4	-21.2	-50.6	-18.7	139.3



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