

RF AMPLIFIER

Available as: QBH-4007, 4 Pin TO-8 (T4)

QBH-9-4007, Connectorized Housing (ES E52-1501)

MODEL QBH-4007

Features

- High Gain: 10.0 dB Typical
- High Power: +27 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

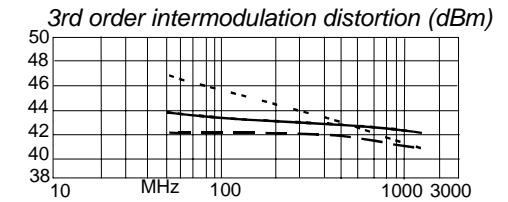
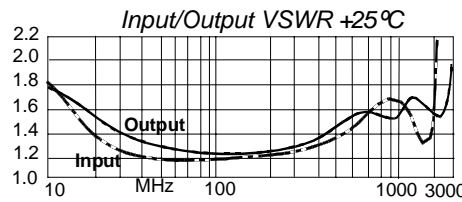
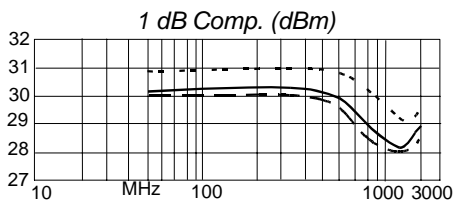
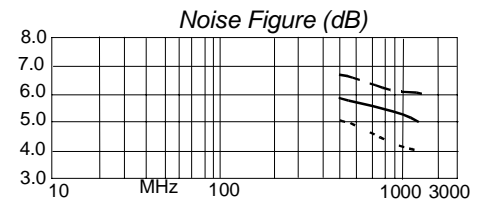
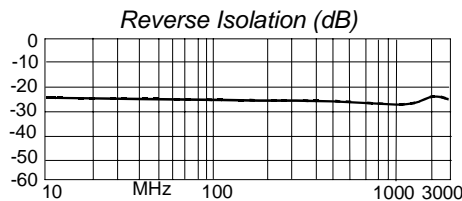
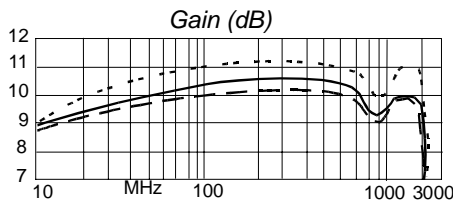
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	50 - 2000 MHz	50 - 2000 MHz
Gain (dB)	10.0 ± 1.0	—
Gain vs. Temperature	—	+0.8/-0.8 Max.
Gain Flatness	2.0	2.0 Max.
Reverse Isolation (dB)	-20	-20 Min.
VSWR In	2.0:1	2.0:1 Max.
VSWR Out	2.0:1	2.0:1 Max.
1 dB Compression (dBm)	+27	+26 Min.
Output Intercept point		
3rd Order	+38	+36 Min.
2nd Order	+46	+45 Min.
Noise Figure (dB)	6.0	7.0 Max.
Power Vdc	+15	+15
mA	225	225 Max.

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.)

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
50	-20.1	-132.4	10.3	-177.0	-24.5	-2.4	-17.6	-19.4
90	-20.7	-144.4	10.5	170.2	-24.6	-11.3	-18.2	-37.0
300	-18.8	-161.3	10.7	123.3	-24.8	-43.8	-17.2	-93.3
600	-15.1	178.9	10.5	61.0	-25.2	-90.1	-13.3	-158.7
900	-12.3	146.5	9.7	5.7	-26.1	-131.0	-13.5	138.7
1200	-11.8	102.1	10.2	-51.1	-25.8	-173.7	-13.3	109.0
1500	-12.8	49.1	10.5	-112.7	-26.2	149.0	-11.7	59.9
1800	-17.2	-59.5	10.5	-178.5	-24.0	82.8	-13.2	-12.8
2000	-12.7	-156.1	10.2	134.1	-23.7	42.6	-13.7	-70.6



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