

RF AMPLIFIER

MODEL QBH-834

Available as: QBH-834, 4 Pin TO-8 Tall (080-22502-0001)
 QBH-5834, 0.450" Square (E52-18563)
 QBH-9-834, Connectorized Housing (ES E52-1501)

Features

- High Gain: 19.7 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	10 - 100 MHz	10 - 100 MHz
Gain (dB)	19.7 ± 0.5	—
Gain vs. Temperature	—	+0.5/-0.5 Max.
Gain Flatness	0.5	0.6 Max.
Reverse Isolation (dB)	-26	-26 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+27	+26 Min.
Output Intercept point		
3rd Order	+37	+35 Min.
2nd Order	+47	+45 Min.
Noise Figure (dB)	5.5	6.5 Max.
Power Vdc	+15	+15
mA	135	139 Max.

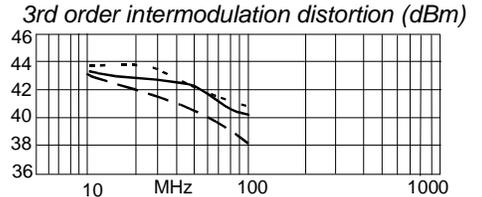
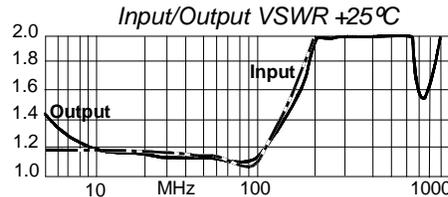
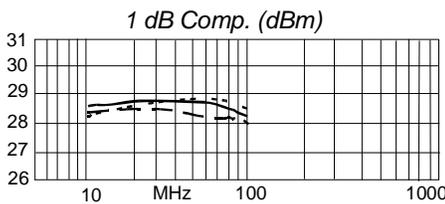
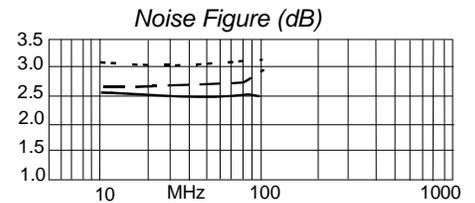
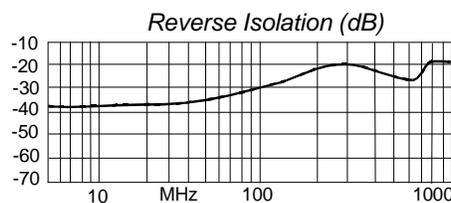
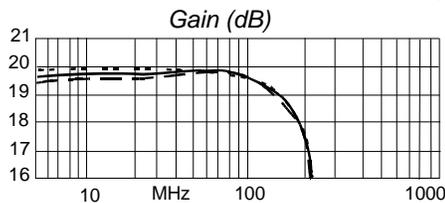
Maximum (No Damage) Ratings

Ambient Operating Temperature -55°C to +105 °C
 Storage Temperature -65°C to +150 °C
 Case Temperature +125 °C
 DC Voltage +17 Volts
 Continuous RF Input Power +7 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.

Revision: 2/19/2016
 ECN-Reduced Continuous Max Input Power from 18 dBm to 7 dBm.

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	-21.6 -168.3	19.7 -179.8	-36.2 23.2	-19.7 60.4
30	-22.2 173.5	19.7 163.9	-34.7 26.1	-24.0 11.2
40	-22.9 169.7	19.7 157.6	-33.9 29.4	-24.6 -5.4
50	-23.9 167.6	19.7 151.2	-32.9 32.6	-25.1 -22.2
60	-25.4 166.3	19.7 145.0	-32.0 33.7	-25.8 -42.8
70	-27.3 178.6	19.7 138.8	-31.1 33.7	-26.5 -69.2
80	-29.3 -170.6	19.7 132.3	-30.3 33.9	-27.2 -103.6
90	-31.0 -146.8	19.7 125.8	-29.4 33.5	-27.7 -137.7
100	-28.6 -131.4	19.6 119.2	-28.6 31.8	-28.2 -162.5



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