

RF AMPLIFIER

Available as: QBH-828, 4 Pin TO-8 (080-10114-0001)
 QBH-9-828, Connectorized Housing (ES E52-1501)

MODEL QBH-828

Features

- High Gain: 16.3 dB Typical
- High Power: +19.5 dBm Typical
- Operating Temp. -54 °C to +85 °C
- Environmental Screening Available

Specifications

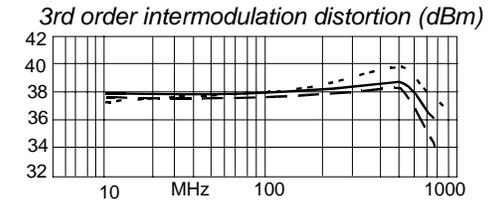
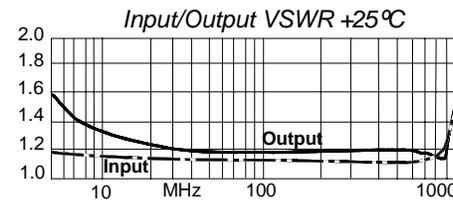
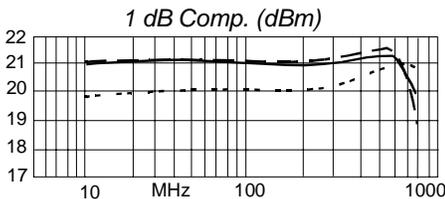
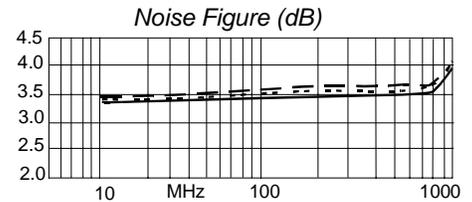
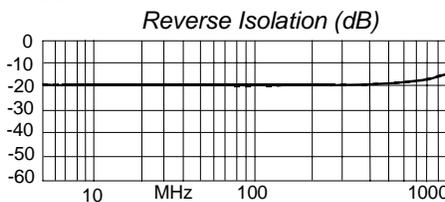
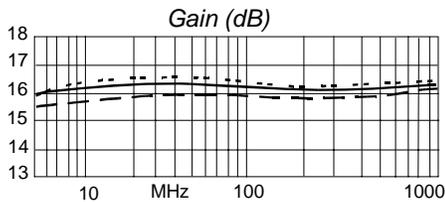
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -54 °C to +85 °C
Frequency	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	16.3 ± 0.5	—
Gain vs. Temperature	—	+0.5/-1.0 Max.
Gain Flatness	1.0	1.0 Max.
Reverse Isolation (dB)	-16	-16 Min.
VSWR In	1.5:1	1.5:1 Max.
VSWR Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+19.5	+18.5 Min.
Output Intercept point		
3rd Order	+30	+28 Min.
2nd Order	+45	+43 Min.
Noise Figure (dB)	4.8	5.4 Max.
Power Vdc	+15	+15
mA	110	120 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 ····· -54 °C

Linear S-Parameters Data

FREQ. MHz	-- S11 -- dB Ang	-- S21 -- dB Ang	-- S12 -- dB Ang	-- S22 -- dB Ang
10	-23.4 -117.9	16.2 -174.9	-19.9 5.4	-17.3 143.7
50	-24.6 -172.5	16.3 169.4	-19.6 -3.6	-21.0 147.9
70	-24.6 179.1	16.3 164.0	-19.6 -6.2	-21.3 142.8
90	-24.7 172.5	16.3 158.8	-19.6 -8.3	-21.5 136.5
200	-24.9 140.1	16.3 131.6	-19.3 -20.5	-21.4 97.4
400	-26.0 92.3	16.2 83.2	-18.6 -43.6	-21.9 25.4
600	-26.0 30.4	16.2 34.7	-17.7 -69.9	-24.6 -51.8
800	-21.4 -13.8	16.3 -14.6	-16.7 -98.8	-21.9 -146.2
1000	-15.4 -57.4	16.3 -65.8	-15.8 -131.2	-13.8 126.2



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