

RF AMPLIFIER

MODEL QBH-145

Available as: QBH-145, 4 Pin TO-8 (T4)
QBH-9-145, Connectorized Housing (ES E52-1501)

Features

- High Gain: 13 dB Typical
- High Power: +19 dBm Typical
- Operating Temp. -55 °C to +100 °C
- Environmental Screening Available

Specifications

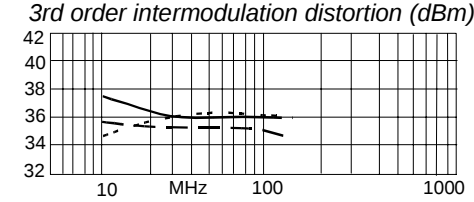
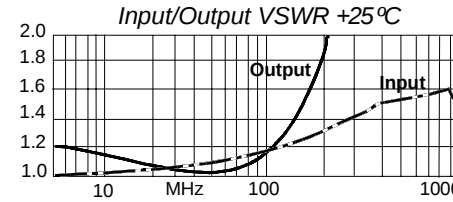
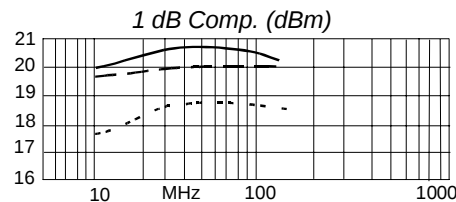
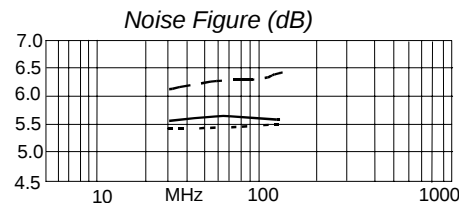
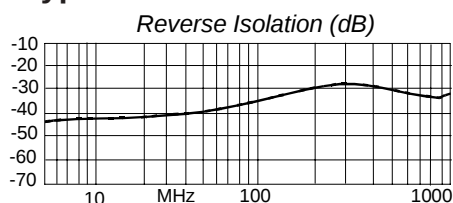
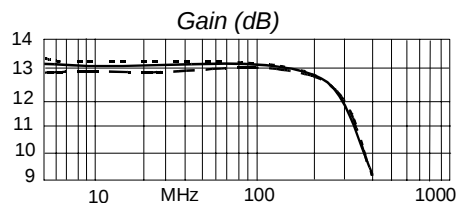
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +100 °C
Frequency	10 - 150 MHz	10 - 150 MHz
Gain (dB)	13.0 ± 0.5	—
Gain vs. Temperature	—	+1.4/-1.0 Max.
Gain Flatness	0.4	0.5 Max.
Reverse Isolation (dB)	-31	-30 Min.
VSWR In	1.5:1	1.5:1 Max.
Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+19	+16 Min.
Output Intercept point		
3rd Order	+34	+32 Min.
2nd Order	+47	+42 Min.
Noise Figure (dB)	5.8	6.5 Max.
Power Vdc	+15	+15
mA	42	45 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 - - - - +100 °C - - - - - -55 °C

Linear S-Parameters Data

FREQ. MHz	-- S11 -- dB Ang	-- S21 -- dB Ang	-- S12 -- dB Ang	-- S22 -- dB Ang
10	-33.9 -17.8	12.9 -179.0	-43.1 15.7	-24.1 123.1
40	-27.8 -44.2	13.0 163.2	-40.0 30.1	-36.6 -147.3
50	-26.9 -54.2	13.0 158.4	-39.1 30.0	-31.5 -128.2
70	-25.1 -70.8	13.0 148.8	-37.1 30.9	-25.6 -126.9
80	-24.3 -78.4	13.0 143.9	-36.3 31.3	-23.7 -130.7
90	-23.6 -85.2	13.0 139.2	-35.6 30.8	-22.1 -134.7
110	-22.3 -98.3	13.0 129.5	-34.2 26.4	-19.4 -143.9
130	-21.3 -110.9	13.0 120.0	-32.9 21.1	-17.2 -153.6
150	-20.3 -123.1	13.0 110.2	-31.7 16.2	-15.2 -163.3



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