

RF AMPLIFIER

Available as: QBH-132, 4 Pin TO-8 Tall (080-22502-0001)
QBH-9-132, Connectorized Housing (ES E52-1501)

MODEL QBH-132

Features

- High Gain: 14.8 dB Typical
- High Power: +16 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Maximum Ratings

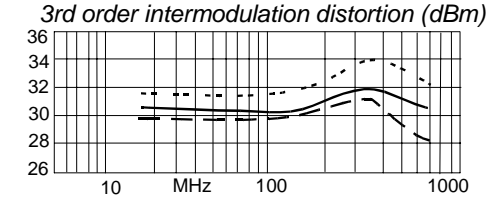
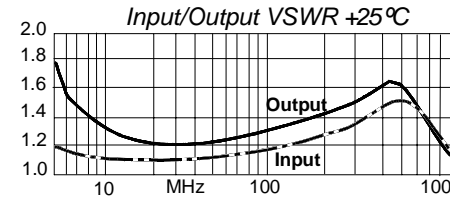
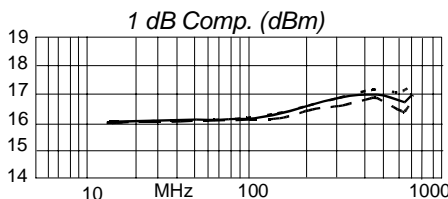
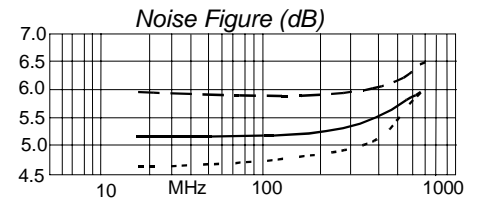
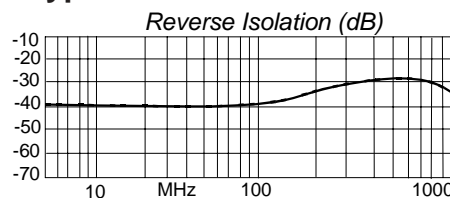
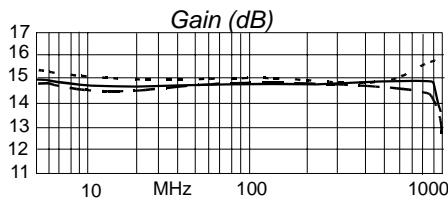
Ambient Operating Temperature -55°C to +125 °C
Storage Temperature -65°C to +150 °C
Case Temperature +125 °C
DC Voltage +16.5 Volts
Continuous RF Input Power +13 dBm
Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
Maximum Peak Power 0.5 Watt (3 μsec Max.)

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	15 - 700 MHz	15 - 700 MHz
Gain (dB)	14.8 ± 0.6	—
Gain vs. Temperature	—	+0.5/-1.0 Max.
Gain Flatness	0.8	1.4 Max.
Reverse Isolation (dB)	-27	-26 Min.
VSWR In	1.7:1	1.8:1 Max.
Out	1.7:1	1.8:1 Max.
1 dB Compression (dBm)	+16	+15.5 Min.
Output Intercept point		
3rd Order	+29	+27 Min.
2nd Order	+39	+37 Min.
Noise Figure (dB)	6.5	7.0 Max.
Power Vdc	+15	+15
mA	44	45 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

FREQ. MH	--S11-- dB	Ang	--S21-- dB	Ang	--S12-- dB	Ang	--S22-- dB	Ang
15	-27.3	-11.5	14.6	-177.0	-39.3	7.7	-19.1	78.0
40	-26.1	-18.8	14.7	171.2	-39.2	9.1	-20.2	54.7
60	-24.9	-35.5	14.7	164.1	-38.8	10.8	-19.4	44.8
80	-23.7	-48.9	14.7	157.4	-38.5	13.0	-18.4	38.1
100	-22.5	-60.8	14.8	150.9	-37.9	15.0	-17.6	32.9
300	-15.9	-134.3	14.7	87.5	-32.4	2.9	-12.4	-19.1
500	-14.4	170.9	14.6	24.4	-28.9	-33.5	-12.4	-74.4
700	-18.5	100.8	14.7	-41.1	-28.3	-80.6	-18.5	-116.4



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