

RF AMPLIFIER

MODEL QBH-126

Available as: QBH-126, 4 Pin TO-8 (T4)
 QBH-9-126, Connectorized Housing (ES E52-1501)

Features

- High Gain: 15.0 dB Typical
- High Power: +16 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Maximum Ratings

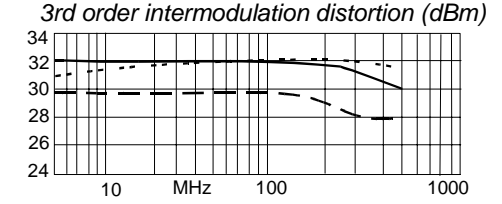
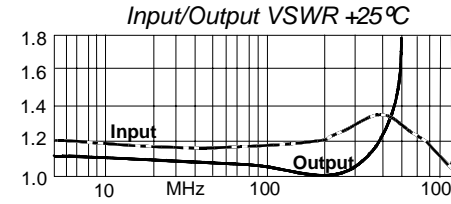
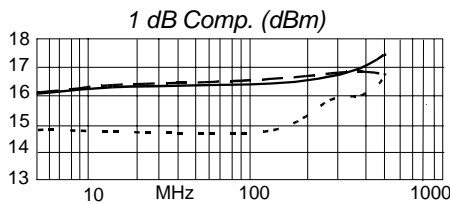
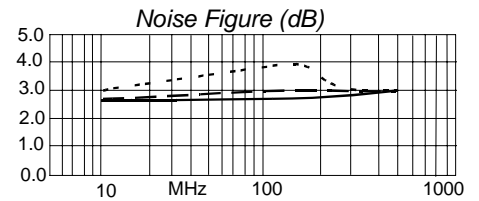
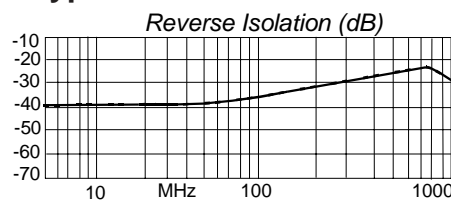
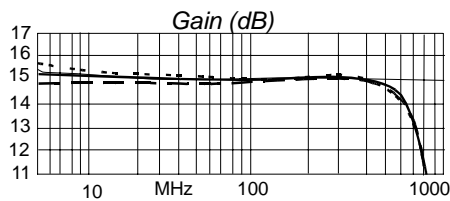
Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -65°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 19.0 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Specifications

CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	15.0 ± 0.5	—
Gain vs. Temperature	—	+1.0/-0.8 Max.
Gain Flatness	0.6	1.2 Max.
Reverse Isolation (dB)	-25	-25 Min.
VSWR In	1.5:1	1.5:1 Max.
Out	1.5:1	1.5:1 Max.
1 dB Compression (dBm)	+16	+15 Min.
Output Intercept point		
3rd Order	+29	+27 Min.
2nd Order	+35	+31 Min.
Noise Figure (dB)	3.8	4.2 Max.
Power Vdc	+15	+15
mA	50	54 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. MHz	-- S11 -- dB Ang	-- S21 -- dB Ang	-- S12 -- dB Ang	-- S22 -- dB Ang
5	-20.4 170.4	15.1 -178.1	-38.5 13.0	-27.5 160.3
9	-20.7 168.3	15.1 179.2	-38.3 9.3	-28.6 165.3
20	-21.5 162.1	15.1 174.9	-38.2 7.1	-29.0 166.9
40	-22.2 153.9	15.1 168.4	-37.8 9.4	-29.7 161.4
60	-22.5 146.2	15.1 162.1	-37.2 13.6	-30.5 153.9
80	-22.6 138.3	15.1 155.9	-36.6 16.2	-31.4 146.6
100	-22.6 130.0	15.1 149.7	-35.9 17.7	-32.8 138.8
300	-18.7 53.6	15.1 88.6	-30.2 -0.8	-29.8 -92.4
500	-17.7 -26.6	15.1 23.8	-27.5 -38.2	-16.1 -173.8



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