

RF AMPLIFIER

Available as: OBH-870, 4 Pin TO-8 (T4)

QBH-9-870, Connectorized Housing (ES E52-1501)

Features

- Gain: 7.9 dB Typical
- High Power: +20 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

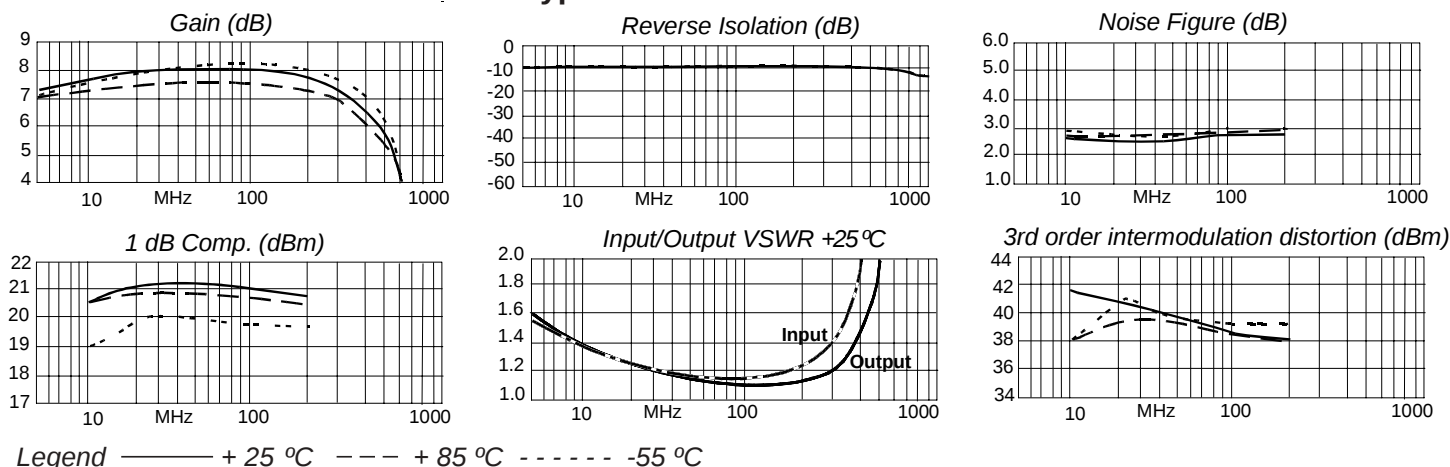
CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	10 - 200 MHz	10 - 200 MHz
Gain (dB)	7.9 ± 0.5	—
Gain vs. Temperature	—	+0.7/-0.8 Max.
Gain Flatness	0.8	1.4 Max.
Reverse Isolation (dB)	-10	-9 Min.
VSWR In	1.5:1	1.6:1 Max.
Out	1.5:1	1.6:1 Max.
1 dB Compression (dBm)	+20	+19 Min.
Output Intercept point		
3rd Order	+36	+32 Min.
2nd Order	+49	+48 Min.
Noise Figure (dB)	3.2	3.5 Max.
Power Vdc	+15	+15
mA	31	33 Max.

Maximum Ratings

Ambient Operating Temperature	-55°C to + 125 °C
Storage Temperature	-65°C to + 150 °C
Case Temperature	+ 125 °C
DC Voltage	+ 18.5 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.)

Note: Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

Typical Performance Data



Linear S-Parameters Data

FREQ. MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
10	-16.9	143.6	7.8	8.2	-11.1	8.3	-16.7	145.9
40	-21.7	154.1	8.1	-10.2	-10.9	-10.4	-21.4	141.9
50	-22.1	155.7	8.2	-14.2	-10.8	-14.5	-22.0	139.6
60	-22.5	157.2	8.1	-18.1	-10.8	-18.4	-22.5	137.0
80	-23.1	162.0	8.1	-25.4	-10.8	-25.8	-23.2	130.8
90	-23.1	161.9	8.1	-29.0	-10.8	-29.5	-23.5	127.8
100	-23.1	162.2	8.1	-32.5	-10.8	-33.0	-23.8	124.3
150	-22.2	168.9	8.0	-49.8	-10.8	-50.7	-24.7	108.7
200	-20.0	174.1	7.9	-66.7	-10.9	-68.1	-25.3	102.6

