

RF AMPLIFIER

Available as: QBH-845, 4 Pin TO-8 (T4)
QBH-9-845, Connectorized Housing (ES E52-1501)

MODEL QBH-845

Features

- High Gain: 17.0 dB Typical
- High Power: +16 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

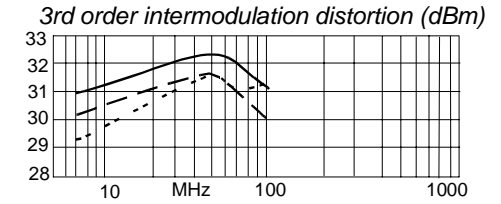
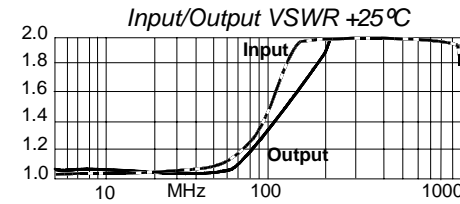
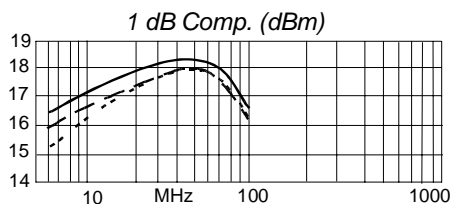
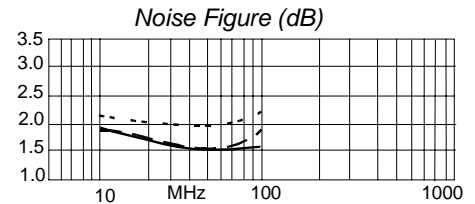
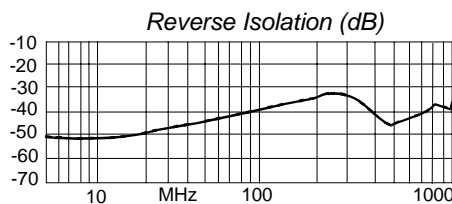
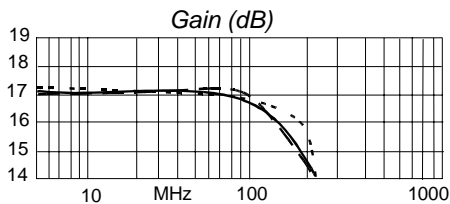
CHARACTERISTIC	TYPICAL	MIN/MAX
	Ta= 25 °C	Ta = -55 °C to +85 °C
Frequency	3 - 100 MHz	3 - 100 MHz
Gain (dB)	17.0 ± 0.5	—
Gain vs. Temperature	—	+0.8/-0.8 Max.
Gain Flatness	0.6	1.0 Max.
Reverse Isolation (dB)	-34	-34 Min.
VSWR In	1.6:1	1.7:1 Max.
VSWR Out	1.6:1	1.7:1 Max.
1 dB Compression (dBm)	+16	+15 Min.
Output Intercept point	3rd Order	+27 Min.
	2nd Order	+41 Min.
Noise Figure (dB)	1.9	2.4 Max.
Power	Vdc	+15
	mA	30
		32 Max.

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.)

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 Data

FREQ. MHz	-- S11--		-- S21--		-- S12--		-- S22--	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
3	-37.7	151.8	17.1	-176.6	-51.9	66.1	-28.4	37.6
6	-40.5	133.7	17.0	179.2	-52.6	51.6	-29.2	20.5
8	-40.4	119.4	17.1	177.4	-52.4	41.7	-29.3	14.7
10	-41.3	117.3	17.1	175.8	-51.1	40.3	-29.4	10.3
30	-29.2	-87.0	17.1	161.9	-46.4	44.9	-31.6	-8.0
50	-23.8	-105.7	17.2	148.5	-42.8	29.8	-33.7	147.9
70	-20.2	-120.8	17.2	134.5	-39.9	22.6	-24.9	139.9
90	-17.1	-136.3	17.2	119.0	-37.8	7.4	-18.8	122.2
100	-15.8	-144.5	17.0	110.3	-37.1	-4.2	-16.4	109.6



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