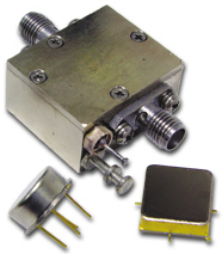
Model # QBH-855

RF/Microwave Amplifier



Features

- Frequency Range: 10 – 100 MHz
- Low Noise Figure: 1.9 dB
- Environmental Screening Available

Technical Specifications

Characteristic	Typical +25 ºC	Min/Max 55ºC to +85 ºC
Frequency (MHz)	10 – 100 MHz	10 – 100 MHz
Gain (dB)	39	37 Min.
Gain Flatness (dB)	+/- 0.6	---
Noise Figure (dB)	1.9	2.6 Max.
Power Out (dBm)	+15	+13 Min.
3rd Order Intercept (dBm)	+27	---
2nd Order Intercept (dBm)	+40	---
Reverse Isolation (dB)	55	---
VSWR In	1.3:1	2.0:1
Out	1.2:1	1.5:1
DC Current (mA)	+35	+40
DC Voltage (V)	+15	+15

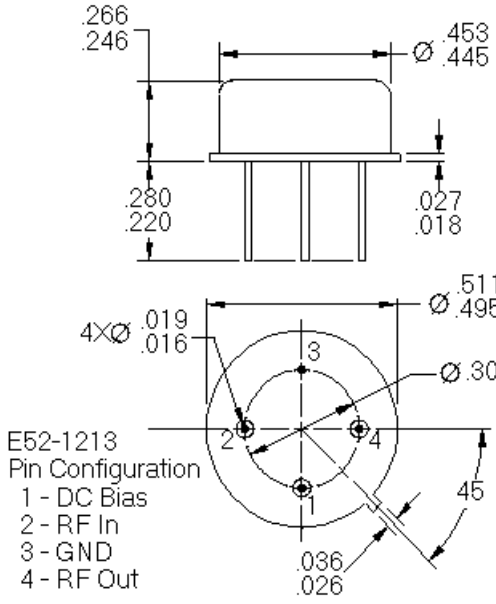
Absolute Maximum (No Damage) Ratings

Sustained Voltage (Vdc)	+17 volts
Pulsed (Transient) Voltage (V)	+17 volts
Operating Temperature	-55 to +125 °C
Storage Temperature	-65 to +150 °C
Maximum Input Drive (Vrms)	+1.1
Thermal Rise, Junction-Case	+30 °C

Note:

- Specifications are guaranteed when tested in a 50 Ohm system.
- Specifications indicated as typical are not guaranteed.
- Outline drawing below to be used for reference only.

Outline Drawing (TO-8)

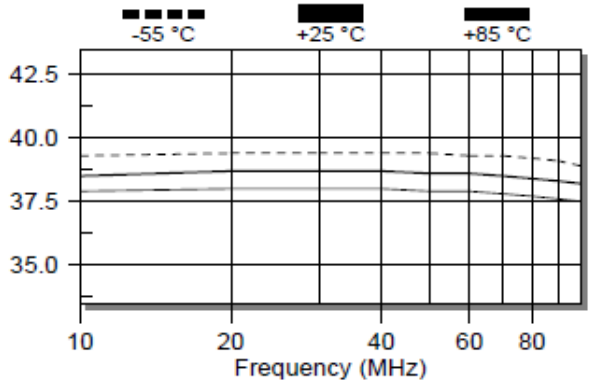


Linear S-Parameter Data

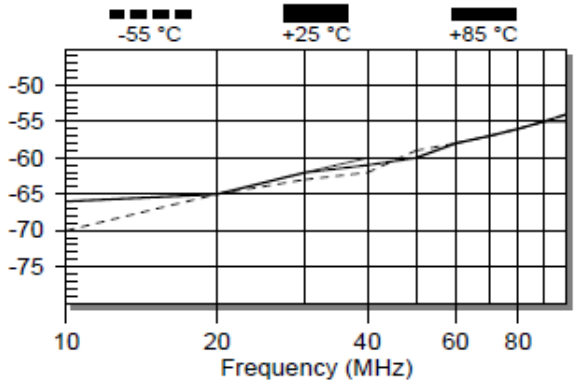
Frequency	S11		S21		S12		S22	
(MHz)	Mag (dB)	Angle	Mag (dB)	Angle	Mag (dB)	Angle	Mag (dB)	Angle
10	-20.0	-153.0	38.5	4.1	-66.0	34.1	-21.0	116.0
20	-19.0	-154.0	38.7	-9.9	-65.0	67.7	-23.0	106.0
30	-18.0	-153.0	38.7	-20.0	-62.0	62.0	-23.0	97.8
40	-18.0	-152.0	38.7	-29.0	-61.0	54.8	-23.0	90.6
50	-17.0	-151.0	38.6	-38.0	-60.0	62.2	-22.0	85.0
60	-16.0	-150.0	38.6	-47.0	-58.0	58.4	-21.0	78.6
70	-16.0	-150.0	38.5	-56.0	-57.0	54.9	-20.0	73.2
80	-15.0	-150.0	38.4	-64.0	-56.0	56.6	-19.0	67.6
90	-14.0	-151.0	38.3	-73.0	-55.0	51.7	-18.0	62.2
100	-14.0	-153.0	38.2	-81.0	-54.0	49.1	-18.0	56.3

Typical Performance Data

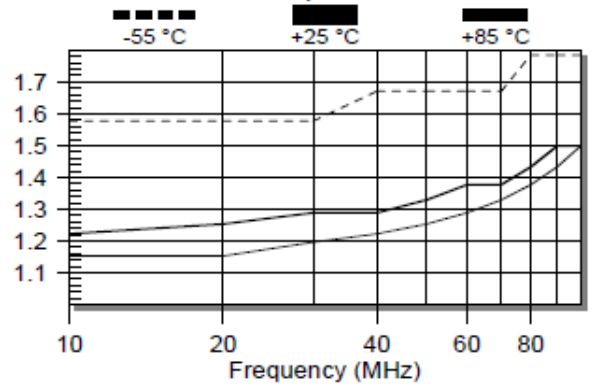
QBH-855 Gain (dB)



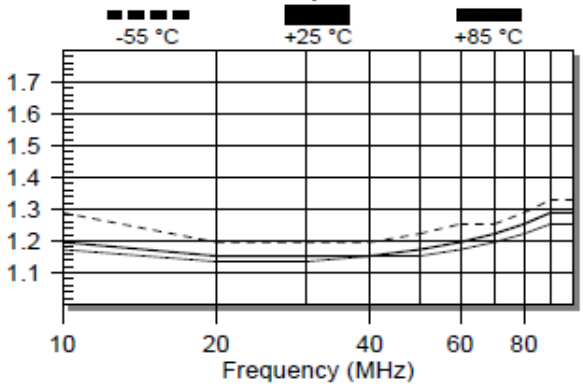
QBH-855 Reverse Isolation (dB)



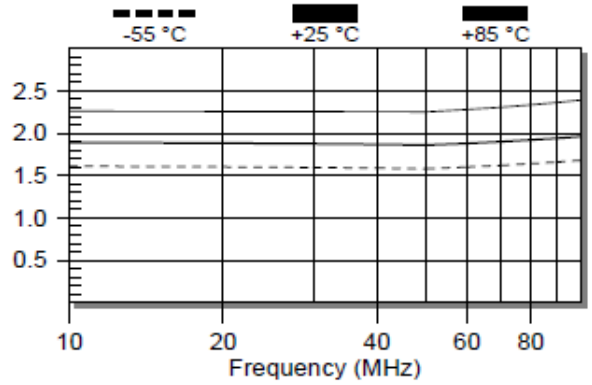
QBH-855 Input VSWR



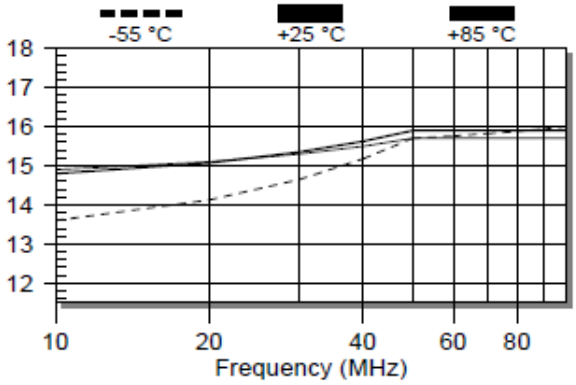
QBH-855 Output VSWR



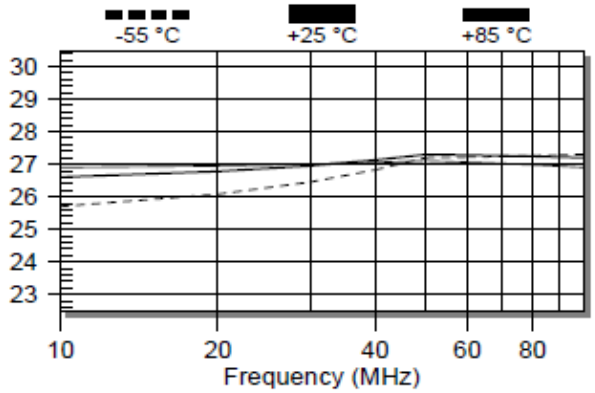
QBH-855 Noise Figure (dB)



QBH-855 1 dB Compression (dBm)



QBH-855 3rd Order Intercept (dBm)



QBH-855 2nd Order Intercept (dBm)