

RF/Microwave Amplifier



Features

• Frequency Range: 10 - 200 MHz

• Low Noise Figure: 1.3 dB

• Environmental Screening Available

Technical Specifications

Characteristic	Typical +25 ºC	Min/Max 55ºC to +85 ºC	
Frequency (MHz)	10 – 200 MHz	10 – 200 MHz	
Gain (dB)	8	6 Min.	
Gain Flatness (dB)	+/- 0.8		
Noise Figure (dB)	1.3	2.5 Max.	
Power Out @1 dB Compression (dBm)	+13	+10 Min.	
3 rd Order Intercept (dBm)	+32		
2 nd Order Intercept (dBm)	+47		
Reverse Isolation (dB)	10		
VSWR In	1.3:1	2.0:1 Max.	
Out	1.3:1	2.0:1 Max.	
DC Current (mA)	14	15 Max.	
DC Voltage (V)	+15	+15	

Linear S-Parameter Data

Frequency	S11		S21		S12		S22	
(MHz)	Mag (dB)	Angle	Mag (dB)	Angle	Mag (dB)	Angle	Mag (dB)	Angle
10	-21.0	159.0	7.8	6.3	-11.0	6.9	-20.0	162.0
20	-24.0	164.0	8.0	-1.4	-11.0	-0.6	-24.0	158.0
30	-26.0	174.0	8.1	-6.7	-11.0	-5.7	-26.0	165.0
40	-27.0	-165.0	8.1	-11.0	-11.0	-9.9	-27.0	177.0
50	-27.0	-159.0	8.1	-15.0	-11.0	-14.0	-27.0	-171.0
60	-25.0	-148.0	8.1	-19.0	-11.0	-18.0	-27.0	-162.0
70	-24.0	-145.0	8.2	-23.0	-11.0	-21.0	-26.0	-155.0
80	-23.0	-142.0	8.2	-27.0	-11.0	-25.0	-25.0	-151.0
90	-22.0	-140.0	8.2	-31.0	-11.0	-28.0	-24.0	-149.0
100	-21.0	-140.0	8.2	-35.0	-11.0	-32.0	-23.0	-149.0
150	-17.0	-149.0	8.1	-53.0	-11.0	-49.0	-20.0	-156.0
200	-14.0	-161.0	8.1	-72.0	-11.0	-66.0	-16.0	-169.0

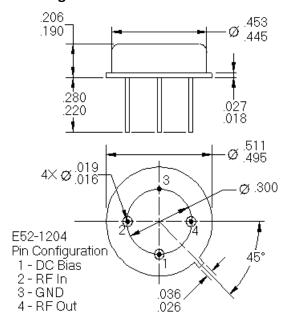
Absolute Maximum (No Damage) Ratings

Sustained Voltage (Vdc)	+20 volts		
Pulsed (Transient) Voltage (V)	+25 volts		
Operating Temperature	-55 to +125 °C		
Storage Temperature	-65 to +150 °C		
Maximum Input Drive (Vrms)	+2.2		
Thermal Rise, Junction-Case	+8 °C		

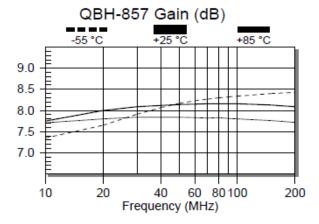
Note:

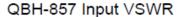
- Specifications are guaranteed when tested in a 50 Ohm system.
- Specifications indicated as typical are not guaranteed.
- Package outline drawing below to be used as reference only.

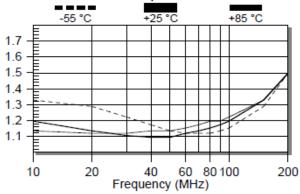
Outline Drawing



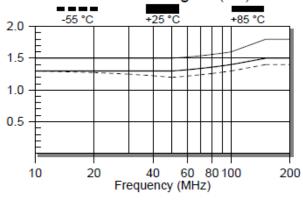
Typical Performance Data



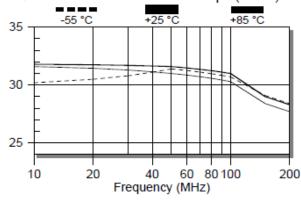




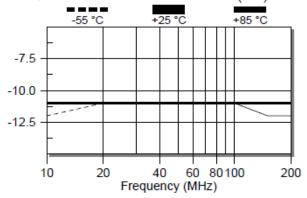
QBH-857 Noise Figure (dB)



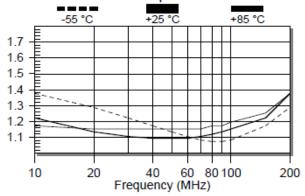
QBH-857 3rd Order Intercept (dBm)



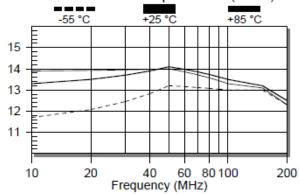
QBH-857 Reverse Isolation (dB)



QBH-857 Output VSWR



QBH-857 1 dB Compression (dBm)



QBH-857 2nd Order Intercept (dBm)

