

# RF AMPLIFIER

Available as: QBH-8980-04, 0.5" x 0.5" Surface Mount

## MODEL QBH-8980-04

### Features

- Low Noise Figure: 1.5 dB Typical
- Low +5 Volt Supply
- Operating Temp. - 40 °C to +85 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +85 °C	
Frequency	10 - 150 MHz	30 - 110 MHz	
Gain (dB)	8.2	7.0 Min.	
Gain Flatness dB (P-P)	0.20	0.75 Max.	
Reverse Isolation (dB)	-11	-9 Max.	
VSWR	In Out	1.3:1 1.3:1	2.0:1 Max. 2.0:1 Max.
1 dB Compression (dBm)	+15.0	+13.5 Min.	
Output Intercept Point 3rd Order	+33	+26 Min.	
Noise Figure (dB)	1.5	3.0 Max.	
Power	Vdc mA	+5 25	+5 35 Max.

### Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -40 °C to +100 °C  
 Storage Temperature ..... -65 °C to + 125 °C  
 Operating Case Temperature ..... + 125 °C  
 DC Voltage ..... + 8 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.)

Care should always be taken to effectively ground the case of each unit.

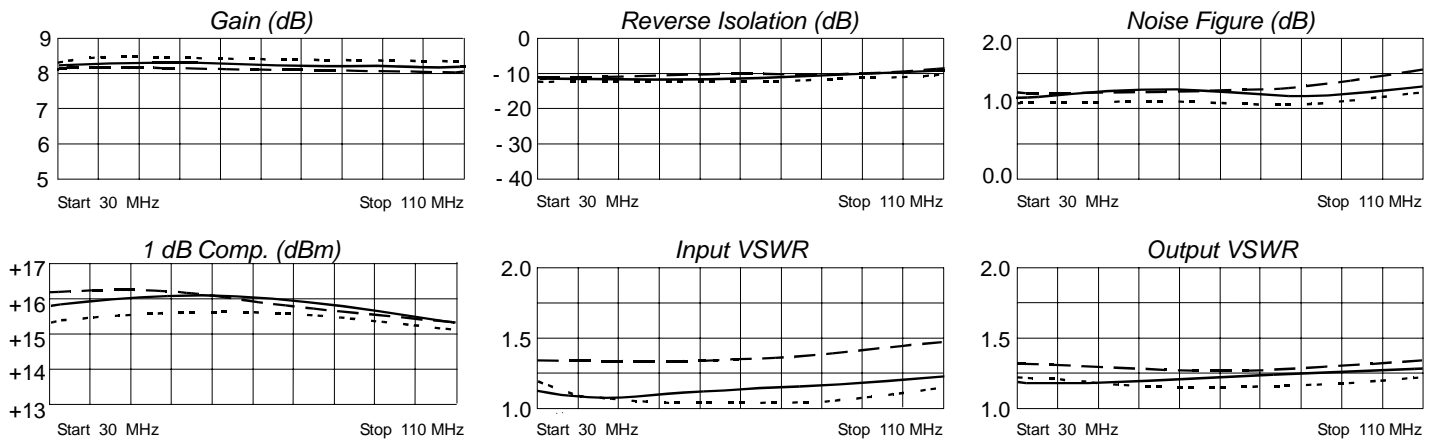
#### Notes:

1. Specifications are guaranteed when tested in a 50 Ohm system.
2. Specifications indicated as typical are not guaranteed.

Revision: December 10, 2024

(The suffix -04 was added when the decision was made to improve the thickness of the internal alumina substrate in order to make the design more rugged).

### Typical Performance Data



Legend ——— + 25 °C    - - - - + 85 °C    ······ -40 °C

