Model # BXHF1174

High Frequency Microwave Amplifier

Frequency Range: 500 MHz to 10 GHz

Features

- Ultra Broad Bandwidth: 500 MHz to 10 GHz
- High Gain: 15 dB Typical
- Laser Welded Housing for Ultimate Environmental Protection
- Internal Voltage Regulator
- RoHS Compliant Option: Model BXHF1174LF

Model BXHF1174 is a high frequency amplifier covering 500 MHz -10 GHz. This design utilizes a laser sealed housing for superior environmental protection. This standard design may also be ordered in a screened MIL-STD-883 version (Model #SXHF1174.) All specification ratings are based on measurements in a 50 Ω (ohm) system with a DC supply voltage tolerance of +/- 2%.

Technical Specifications

Parameter	Unit	Typical	Min/Max
Frequency Range	GHz	500 MHz to 10 GHz	500 MHz to 10 GHz
Gain	dB	15	13.5
Noise Figure* (2 GHz to 10 GHz)	dB	4.0	5.0
Output Power @ 1 dB Compression	dBm	20	19
Output 3rd Order Intercept	dBm	30	-
Output 2nd Order Intercept	dBm	38	-
Reverse Isolation	dB	20	-
Input VSWR	---	1.7:1	2.0:1
Output VSWR	---	1.7:1	2.0:1
Supply Voltage	volts	+10 to +15	+10 to +15
Supply Current	mA	200	225

Maximum Ratings

Maximum (No Damage) Ratings	
Storage Temperature	-55°C to +85°C
Operating Temperature	-40°C to +85°C
DC Voltage @ 25°C	+18 volts
Input Drive @ 25°C (CW)	+13 dBm

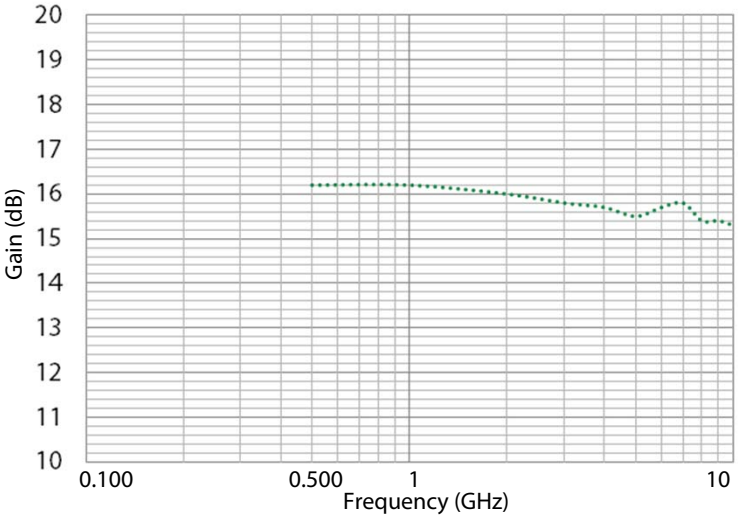
- Typical values are measured at 25°C, but not guaranteed.

Mechanical & Electrical

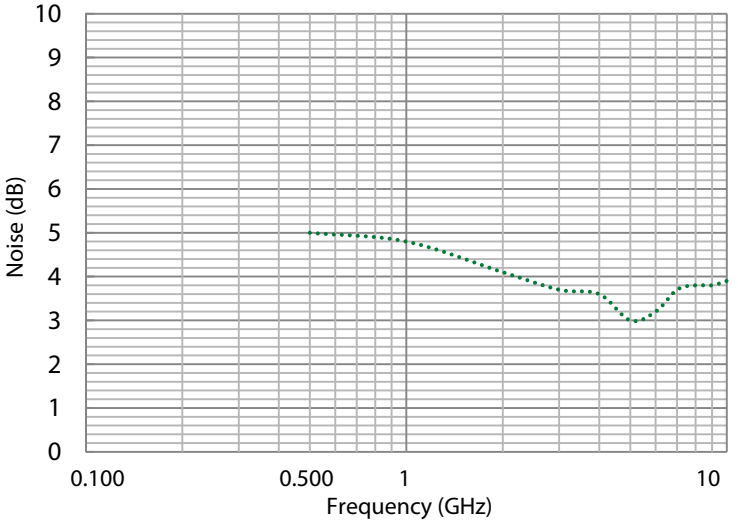
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	0.870" L x 1.060" W x 0.300" H
Housing Drawing	HF1 Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

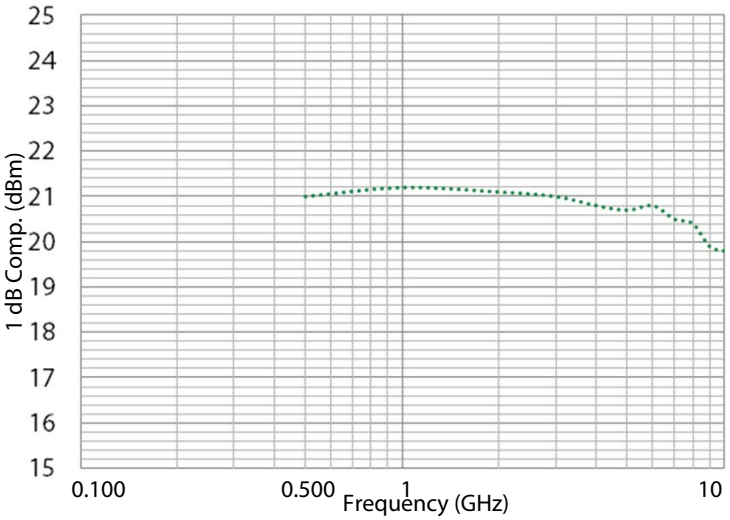
Gain (dB)



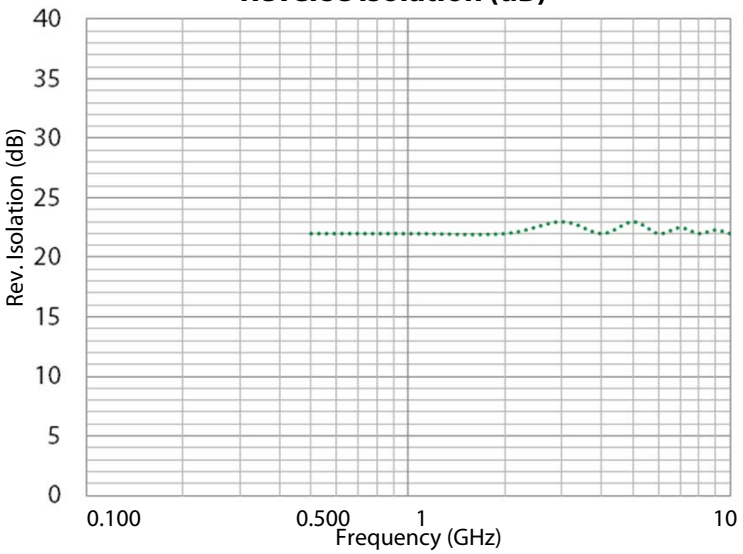
Noise Figure (dB)



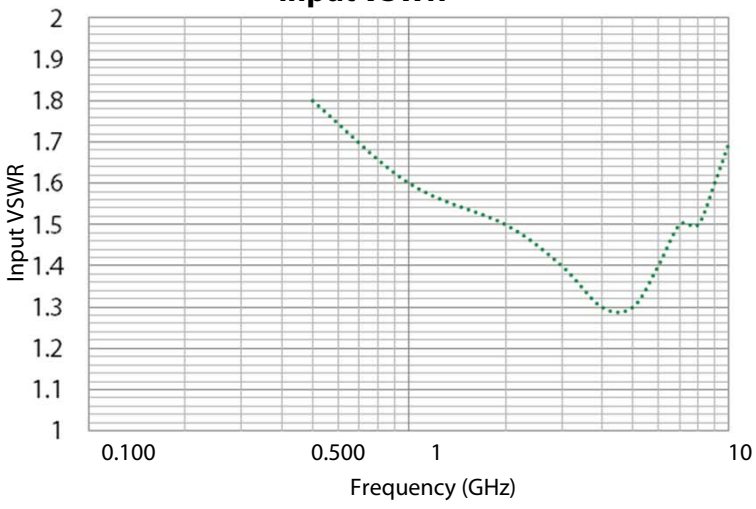
1 dB Compression (dBm)



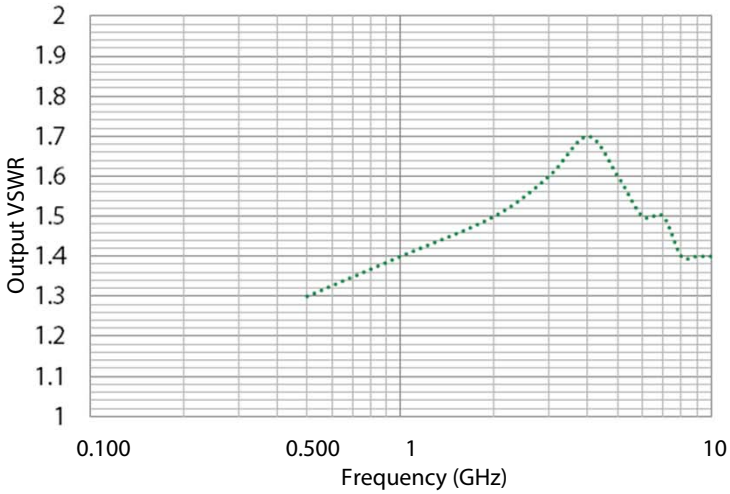
Reverse Isolation (dB)



Input VSWR



Output VSWR



Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

Outline Drawing

(for reference only)