

High Frequency Microwave Amplifier

Frequency Range: 10-20 GHz



Features

- Ultra Broad Bandwidth: 10-20 GHz
- Low Noise Figure: 3.8 dB
- Laser Sealed Housing
- RoHS Compliant Option: Model BXHF1071LF 
- Field Replaceable Connectors

Model BXHF1071 is a high frequency amplifier covering 10-20 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 #SXHF1071.) 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	10-20	10-20
Gain	dB	26	25 / 27 Max.
Noise Figure	dB	3.8	4.0 Max.
Gain Flatness	dB	+/- 0.5	---
Gain vs. Temperature	dB	+/- 1.0	+/- 2.0 Max.
Input VSWR	---	1.9:1	2.0:1
Output VSWR	---	1.9:1	2.0:1
Output Power @ 1 dB Compression	dBm	16	-
Output 3 rd Order Intercept	dBm	26	25
Supply Voltage	volts	+12	+12
Supply Current	mA	150	180 Max.

Maximum Ratings

Maximum (No Damage) Ratings	
Storage Temperature	-55°C to +85°C
Operating Temperature	-28°C to +85°C
DC Voltage @ 25°C	+15 volts
Input Drive @ 25°C (CW)	+13 dBm

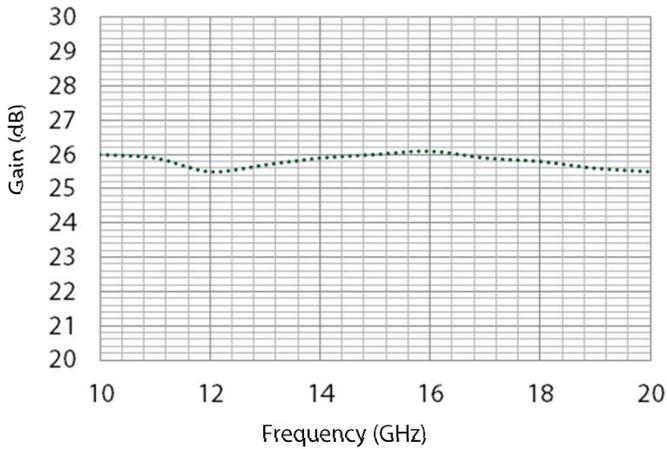
* Typical values are measured at 25°C, but not guaranteed.

Mechanical & Electrical

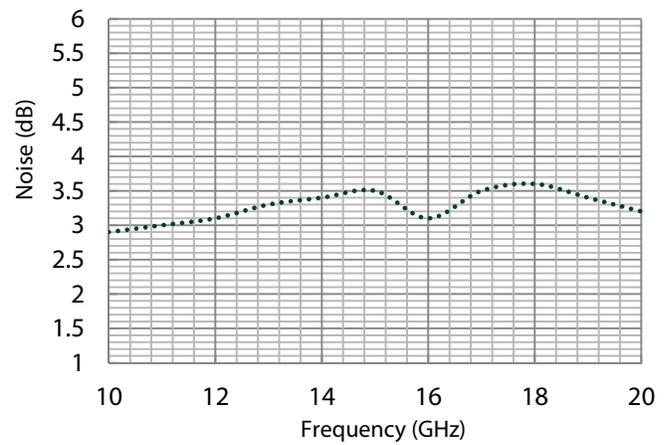
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +85°C
Housing Size	1.500" L x 1.060" W x 0.300" H
Housing Drawing	HF2 Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

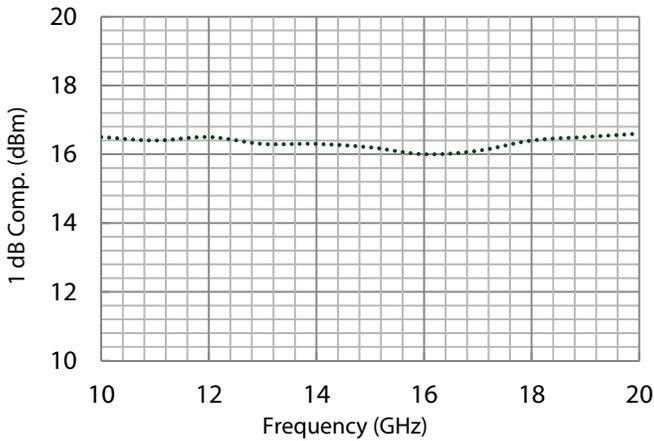
Gain (dB)



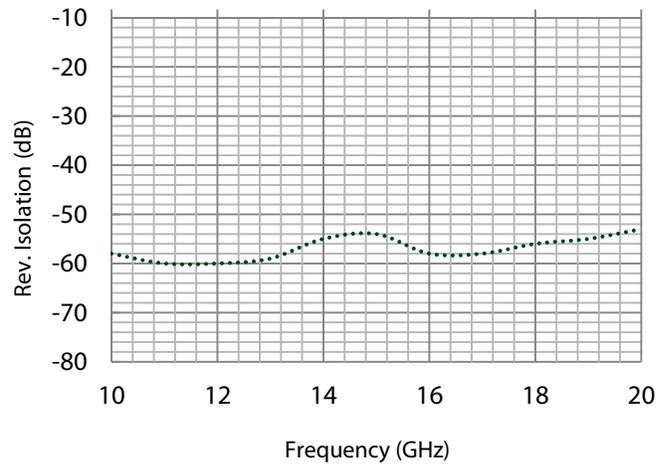
Noise Figure (dB)



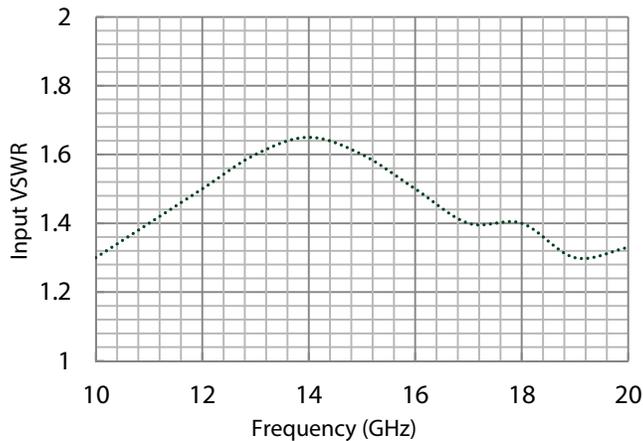
1 dB Compression (dBm)



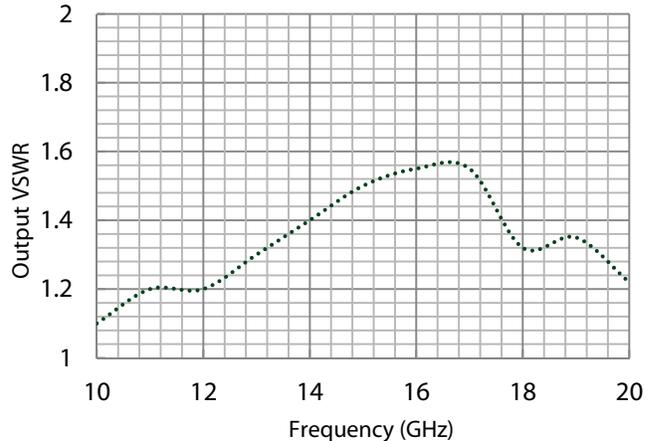
Reverse Isolation (dB)



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

