


Standard Microwave Amplifier

Frequency Range: 100 MHz to 20 GHz



Features

- Ultra Broad Bandwidth: 100 MHz to 20 GHz
- High Power: +26.5 dBm Typical
- Internal Voltage Regulator: +12 to +15 volts
- RoHS Compliant Option (Model Number BXHF1176-LF) 

Model BXHF1176 is a high frequency amplifier covering 100 MHz to 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 #SXHF1176). 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	MHz	100 MHz to 20 GHz	100 MHz to 20 GHz
Gain	dB	11	8
Noise Figure	dB	4.5	8
Output Power @ 1 dB Compression	dBm	26.5	22
Output 3 rd Order Intercept	dBm	36	---
Output 2 nd Order Intercept	dBm	44	---
Reverse Isolation	dB	20	---
Input VSWR	---	2.0:1	2.2:1
Output VSWR	---	2.0:1	2.2:1
Supply Voltage	volts	+12 V to +15 V	+12 V to +15 V
Supply Current	mA	250	270

Maximum Ratings

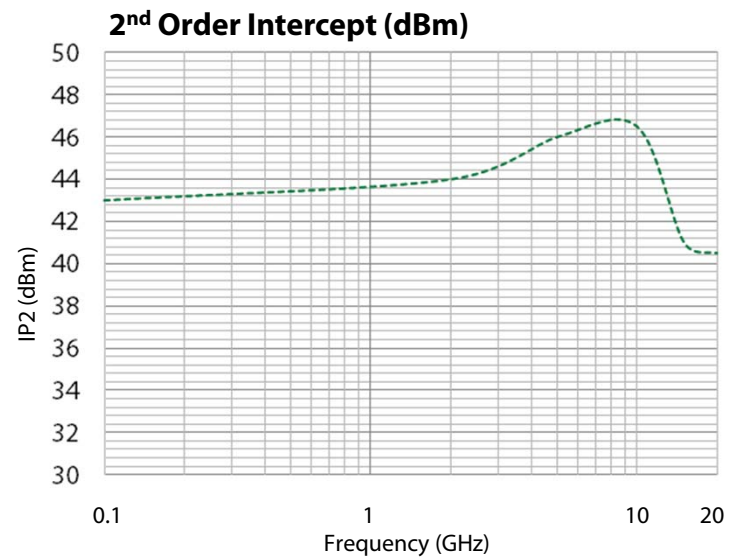
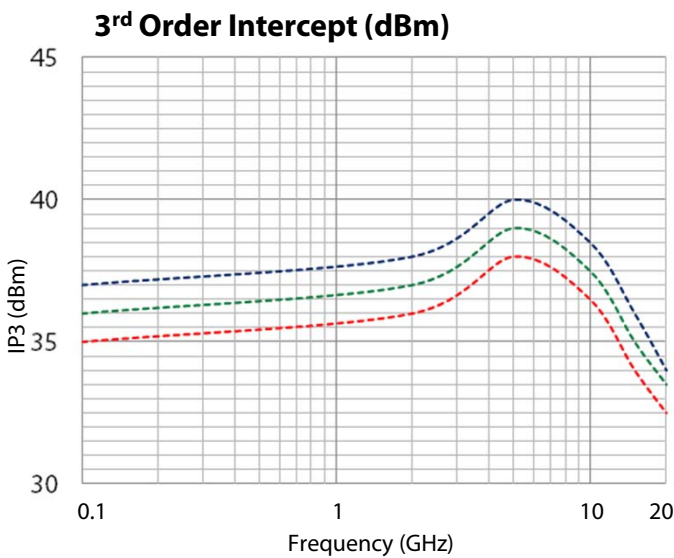
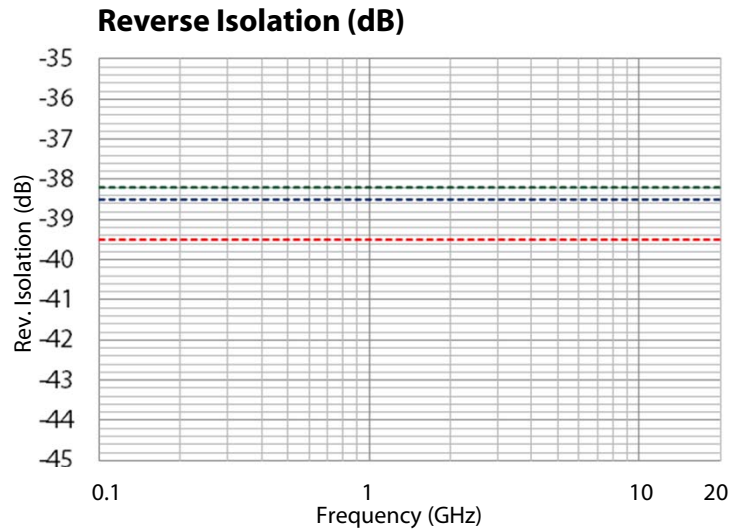
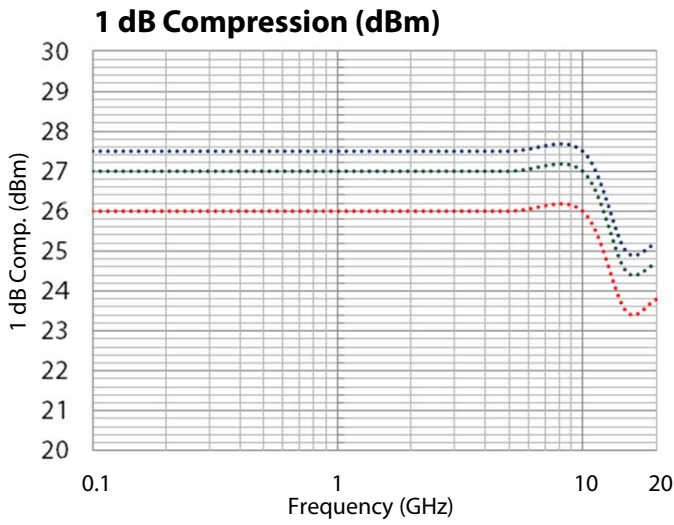
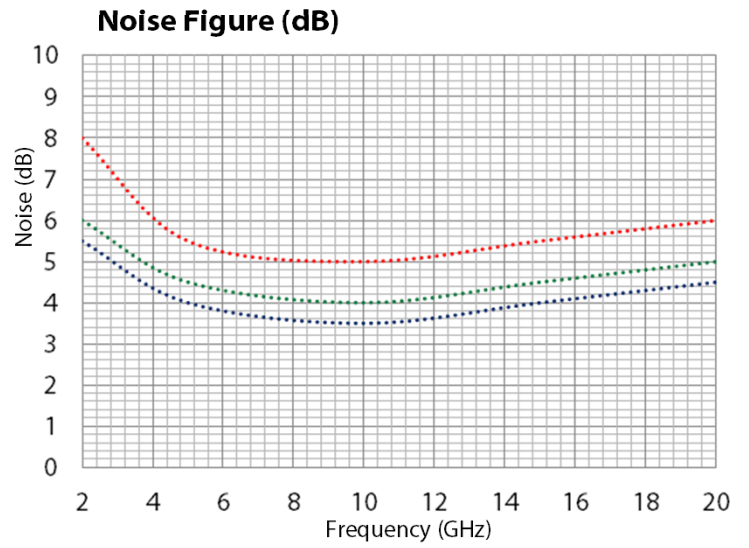
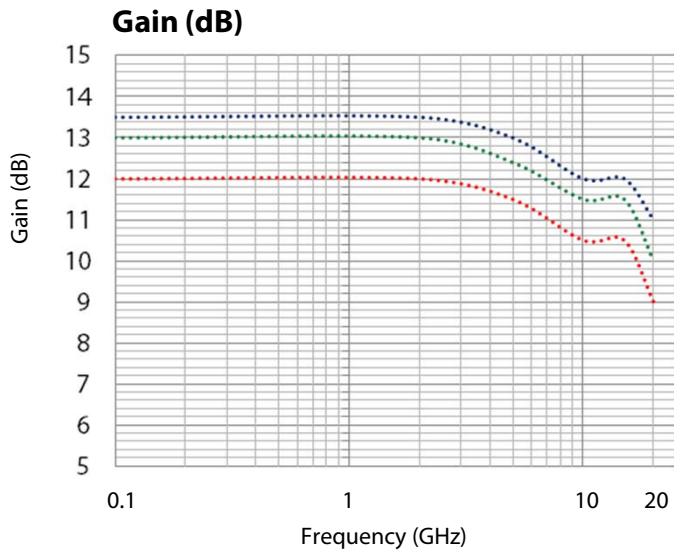
Maximum (No Damage) Ratings	
Storage Temperature	-62°C to +125°C
Operating Temperature	-55°C to +85°C
DC Voltage @ 25°C	+18 volts
Input Drive @ 25°C (CW)	13 dBm

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

Mechanical & Electrical

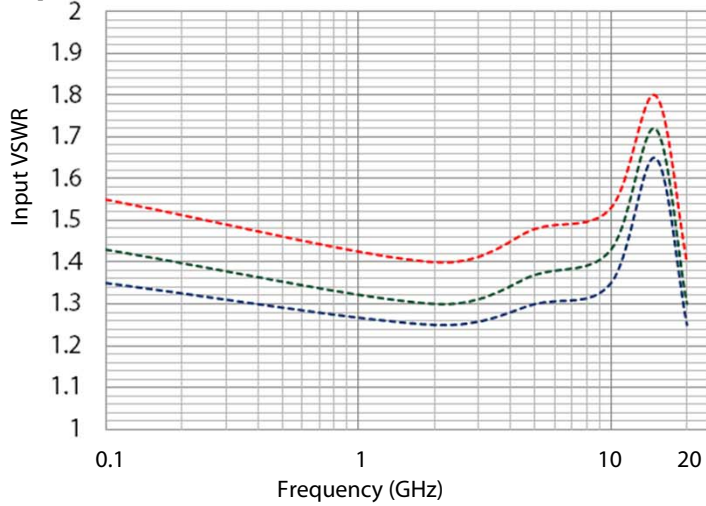
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	1.50" L x 1.06" W x 0.30" H
Housing Drawing	SMA Connectorized Housing (HF2)

Typical Performance Graphs

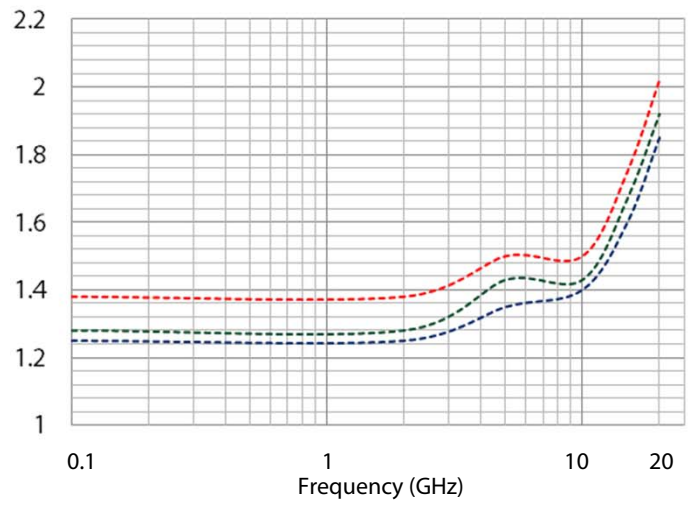


Typical Performance Graphs

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

