

High Frequency Millimeter-wave Amplifier

Frequency Range: 35 GHz to 45 GHz



Features

- Millimeter Wave Operation
- Laser Sealed Housing
- Internal Voltage Regulation
- Dual Stage Amplifier

The Model BXHF1200 is standard high frequency amplifier covering 35 GHz to 45 GHz. This two stage design, utilizes a laser sealed housing for the ultimate in environmental protection. This standard design may also be ordered in a screened MIL-STD-883 version as a model SXHF1200. All specification ratings are based on measurements in a 50 ohm system with a DC supply voltage tolerance of +/- 2%.

Technical Specifications

Parameter	Unit	Typical	Min/Max
Frequency Range	GHz	35 - 45	35 - 45
Gain	dB	34	30 Min.
Noise Figure	dB	5.0	---
Output Power @ 1 dB Compression	dBm	+17	+15 Min.
Reverse Isolation	dB	50	---
Input VSWR	---	1.75:1	2.0:1 Max.
Output VSWR	---	1.75:1	2.0:1 Max.
Supply Voltage	volts	+12 to +15	+12 to +15
Supply Current	mA	300	325

Maximum (No Damage) Ratings

Parameter	Unit
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)	-5 dBm

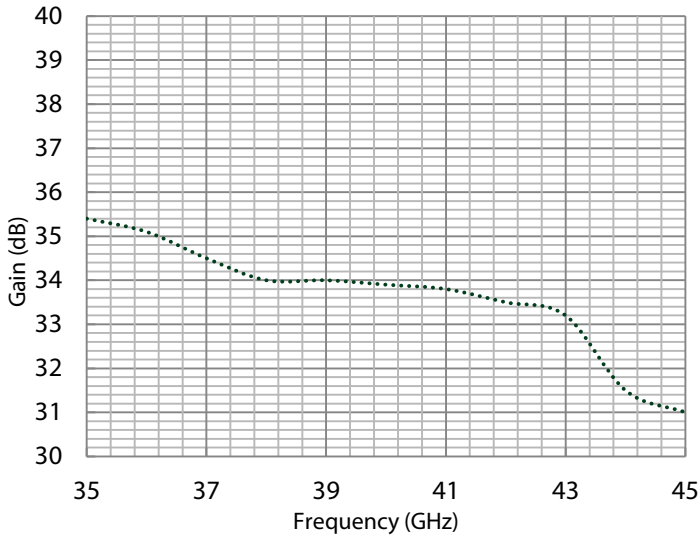
- Typical values are measured at 25°C, but not guaranteed.
- 7/31/2016: ECN: Removed Intercept Values and NF max value from the datasheet.

Mechanical & Electrical

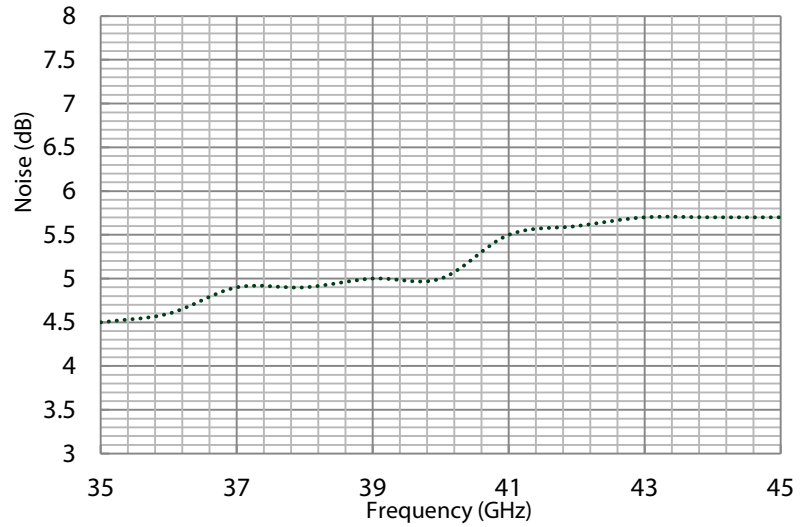
Parameter	Specification
Housing Size	1.500" L x 1.060" W x 0.300" H
Housing Drawing	HF2
RF Connectors	2.92 mm Female Replaceable Connectors

Typical Performance Graphs

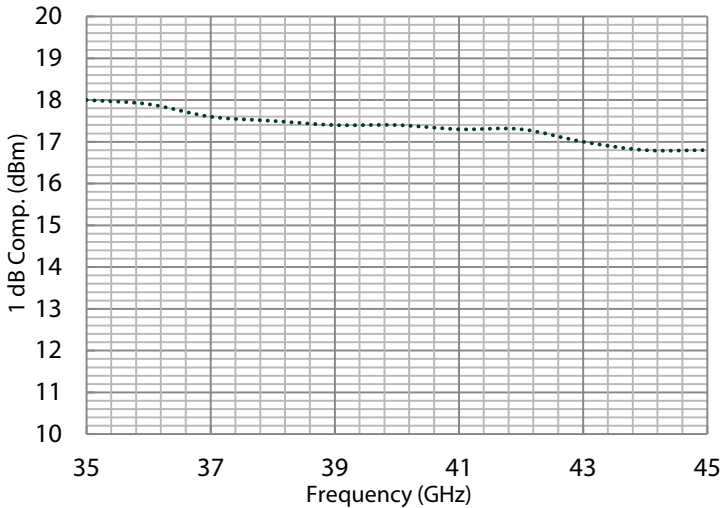
Gain (dB)



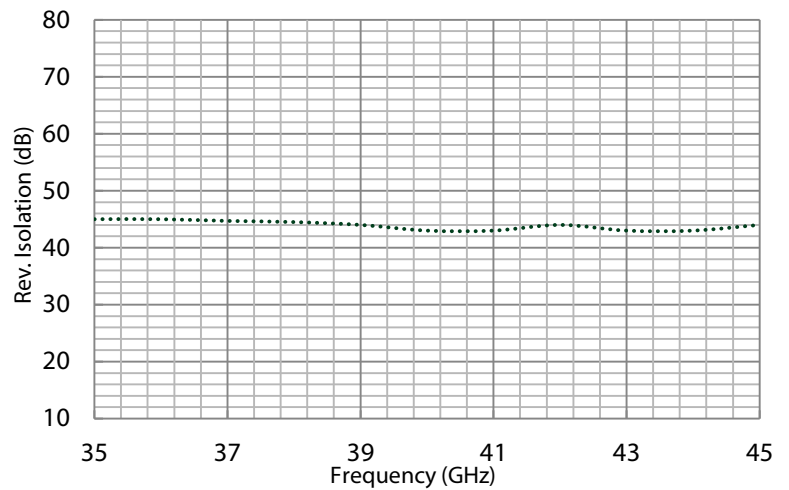
Noise Figure (dB)



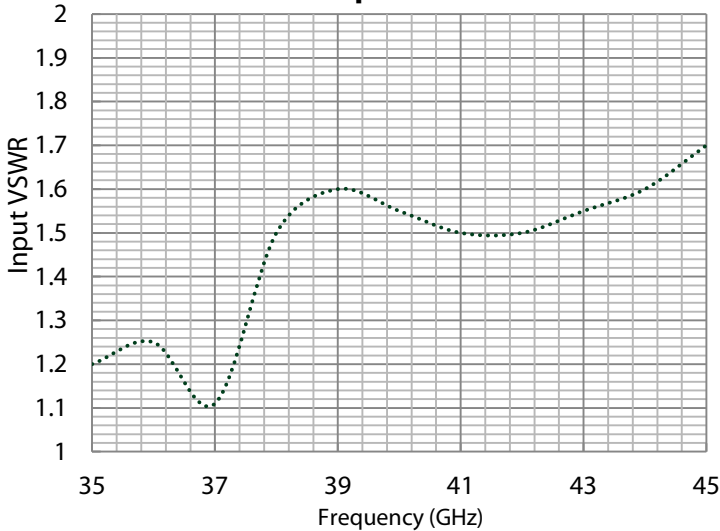
1 dB Compression (dBm)



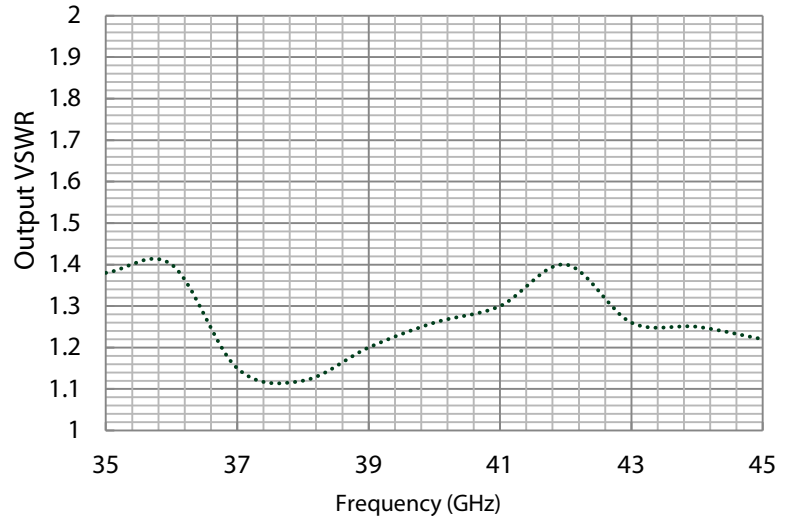
Reverse Isolation (dB)



Input VSWR



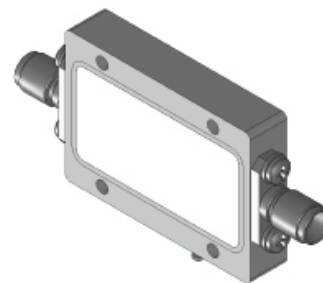
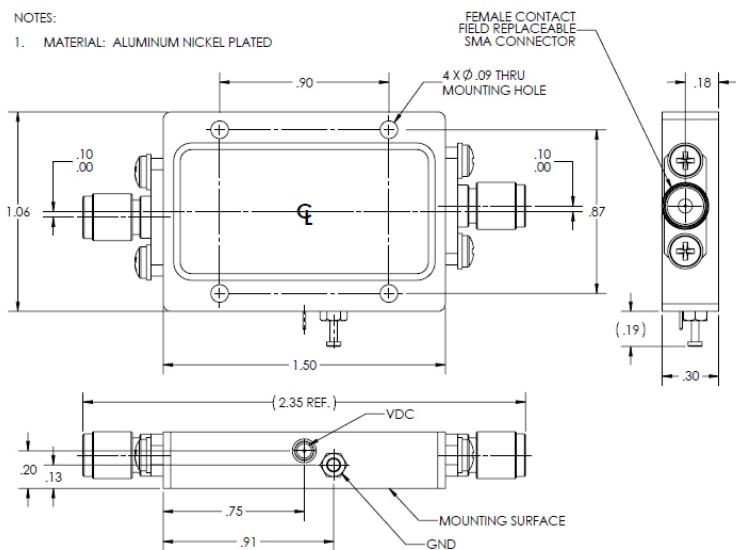
Output VSWR



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



**SMA CONNECTORS
REMOVED**

