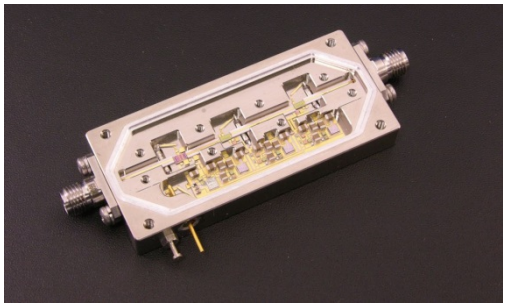
High Frequency Microwave Amplifier

Frequency Range: 2-18 GHz



Features

- High Frequency and Broad Bandwidth: 2-18 GHz
- Low Noise Figure: 3.5 dB Typical
- Internal Voltage Regulator
- Low Phase Noise Performance
- EAR99 and RoHS Compliant

Model BXHF1203 is a high frequency amplifier covering 2-18 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 #SXHF1203) 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	2 to 18	2 to 18
Gain	dB	46	43
Noise Figure	dB	3.5	5.0
Output Power @ 1 dB Compression**	dBm	28	25
Output 3rd Order Intercept	dBm	32	-
Reverse Isolation	dB	65	-
Input VSWR	---	1.5:1	2.0:1
Output VSWR	---	1.5:1	2.0:1
Supply Voltage	volts	+15	+15
Supply Current	mA	650	700

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

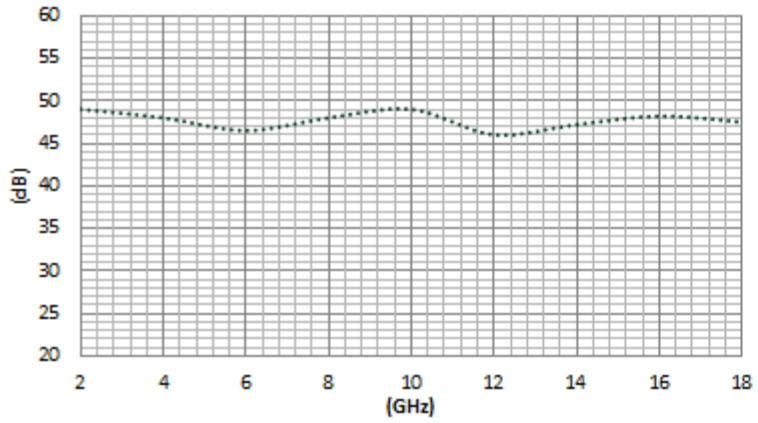
- Typical values are measured at 25°C, but not guaranteed.
- Min/Max values are guaranteed from -20°C to 70°C.

Mechanical & Electrical

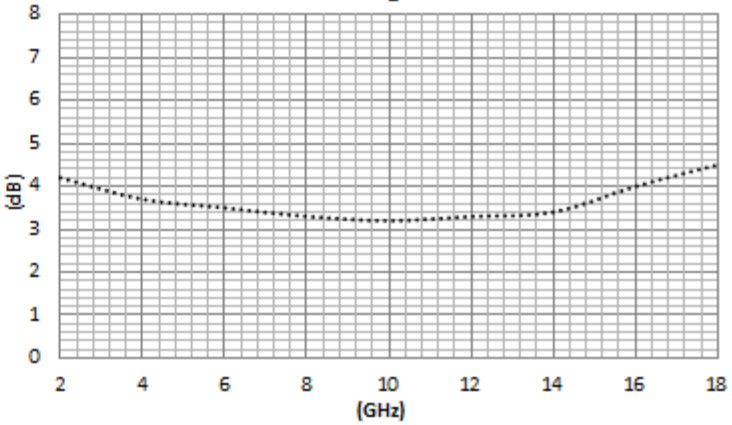
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	2.37" x 1.06" x 0.30"
Housing Drawing	HF3 Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

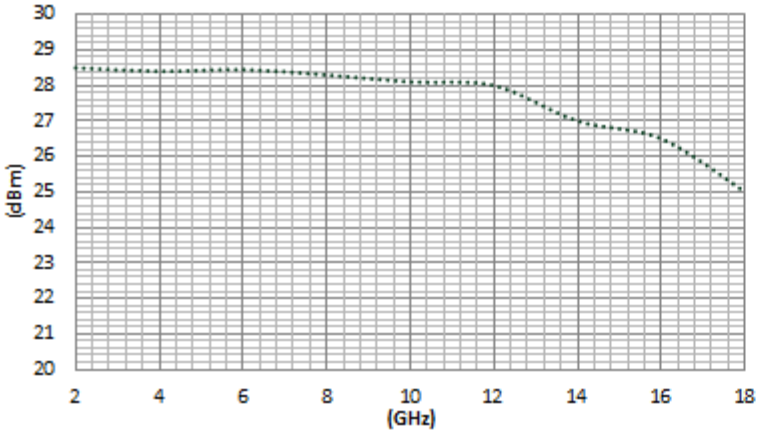
Gain



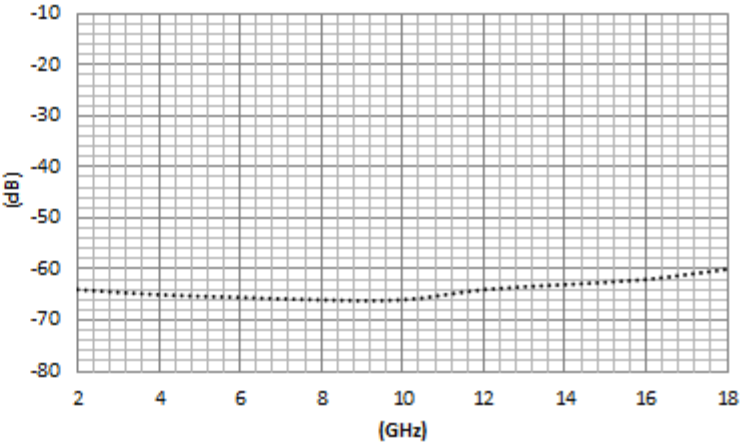
Noise Figure



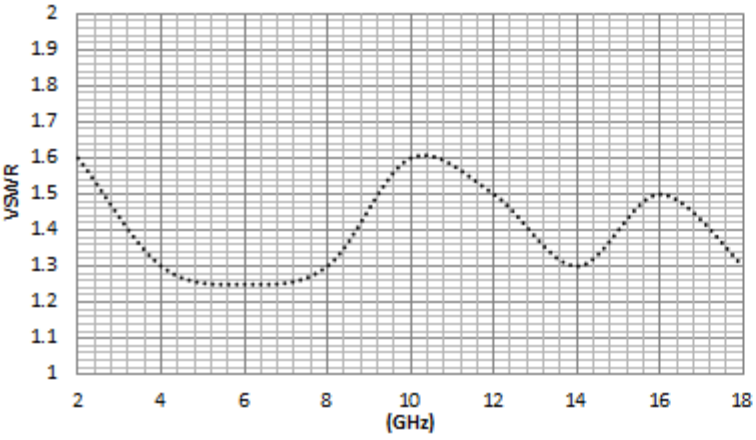
Output Power (1 dB Compression)



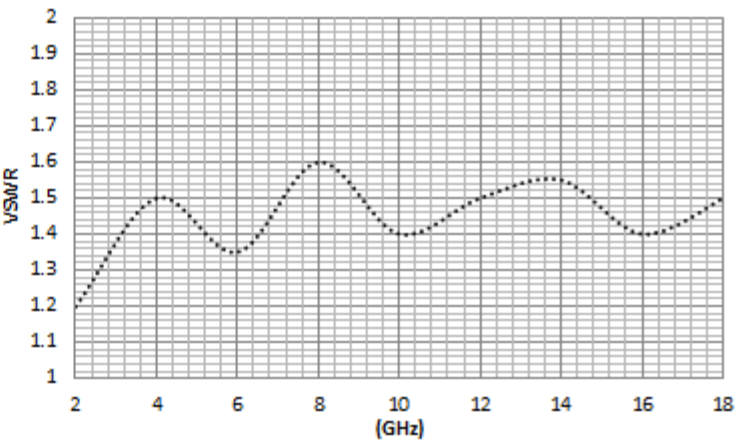
Reverse Isolation



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)