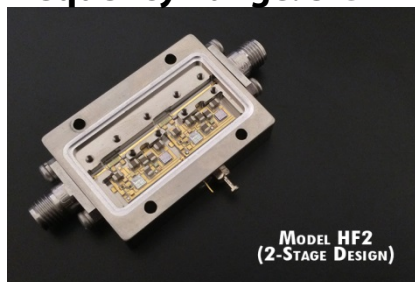


High Frequency Microwave Amplifier

Frequency Range: 3 GHz to 5 GHz



Features

- High Linearity: IP2 47 dBm
- High Gain: 36 dBm
- Laser Welded Housings for Ultimate Environmental Protection
- RoHS Compliant Option: Model BXHF1206LF

Model BXHF1206 is a high frequency amplifier covering 3000-5000 MHz. This design utilizes a laser sealed hermetic housing for superior environmental protection. This standard design may also be ordered in a screened MIL-STD-883 version (Model #SXHF1206). All specification ratings are based on measurements in a 50 Ω (ohm) system with a dc supply voltage tolerance of +/- 0.5 volts.

Technical Specifications

Parameter	Typical	Min/Max
Frequency Range	3000 to 5000 MHz	3000 to 5000 MHz
Gain	36 dB	35 dB (Min)
Noise Figure	4.0 dB	5.0 dB (Max)
Output Power @ 1 dB Compression	26 dBm	25 dBm (Min)
Output 3 rd Order Intercept	37 dBm	---
Output 2 nd Order Intercept	47 dBm	---
Reverse Isolation	45 dB	---
Input VSWR	1.7:1	2.0:1 (Max)
Output VSWR	1.7:1	2.0:1 (Max)
Supply Voltage	+15 volts	15 volts
Supply Current	475 mA	500 mA (Max)

Maximum Ratings

Maximum (No Damage) Ratings	
Storage Temperature	-62°C to +90°C
Operating Temperature	-55°C to +85°C
DC Voltage @ 25°C	+18 volts
Input Drive @ 25°C (CW)	+13 dBm

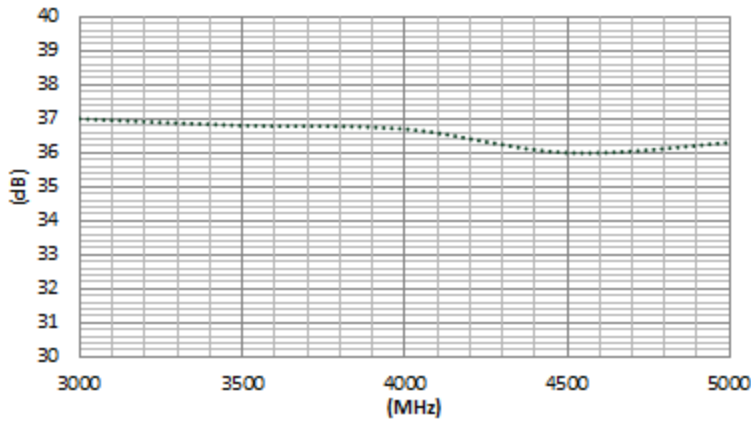
- Typical values are measured at 25°C, but not guaranteed.

Mechanical & Electrical

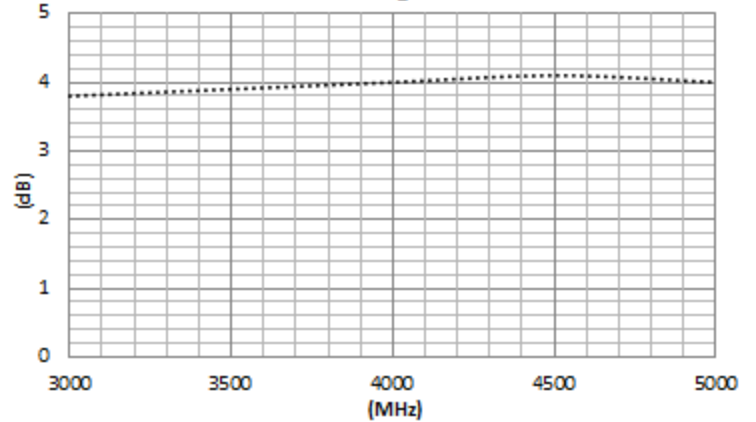
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	1.36" L x 0.660" W x 0.33" H
Housing Drawing	H2L Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

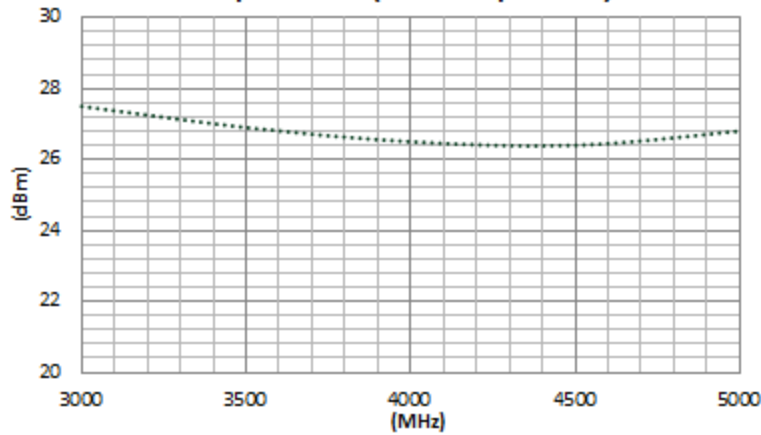
Gain



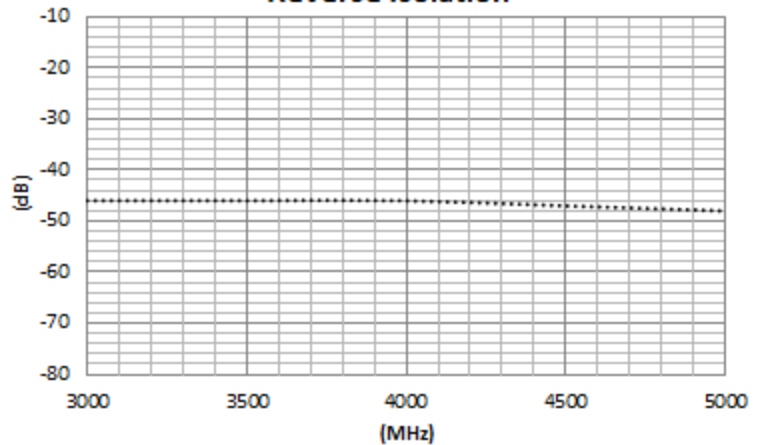
Noise Figure



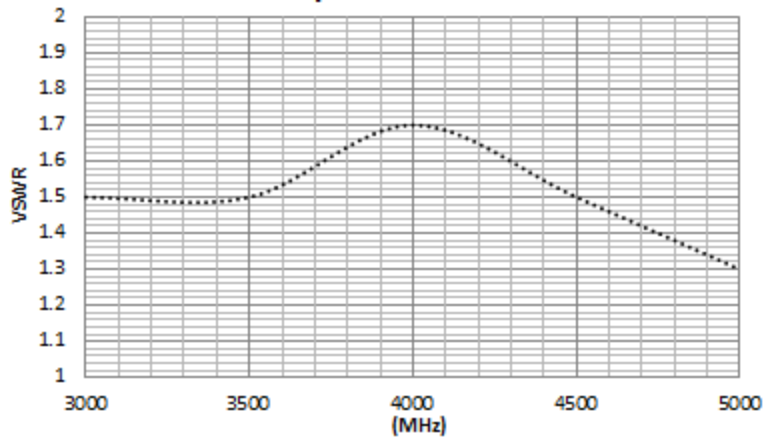
Output Power (1 dB Compression)



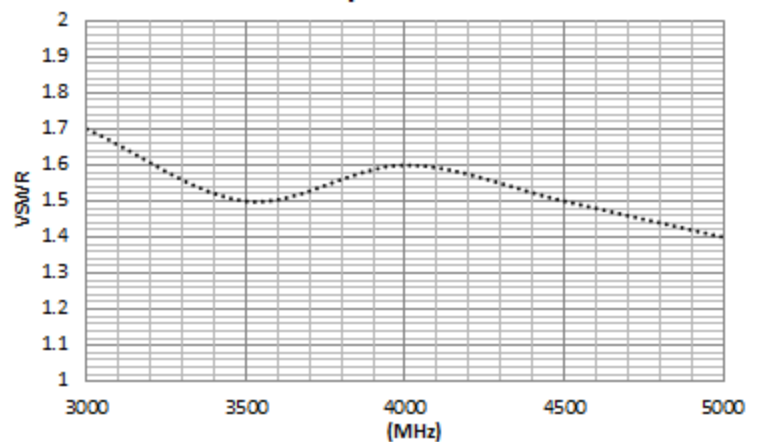
Reverse Isolation



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 (H2L)

(For reference only)

