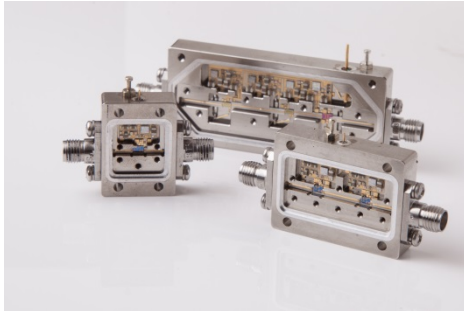


High Frequency Microwave Amplifier

Frequency Range: 1000 – 5000 MHz



Features

- Two Stage Design
- Laser Welded Housing for Ultimate Environmental Protection
- Low Noise Figure
- No External Block Caps needed

Model BXHF1241 is a high frequency amplifier covering 1-5 GHz. This design utilizes a laser sealed housing for superior environmental protection. 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	1 to 5	1 to 5
Gain	dB	21.5	20
Noise Figure	dB	2.5	4.0
Output Power @ 1 dB Compression	dBm	21	19
Third Order Intercept	dBm	33	---
Reverse Isolation	dB	50	---
Input VSWR	---	1.5:1	2.0:1
Output VSWR**	---	1.5:1	2.0:1
Supply Voltage	volts	+15	+15
Supply Current	mA	260	280

Absolute Maximum (No Damage) Ratings

Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
Case Temperature	+125 °C
DC Voltage	+18 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 μsec Max.)

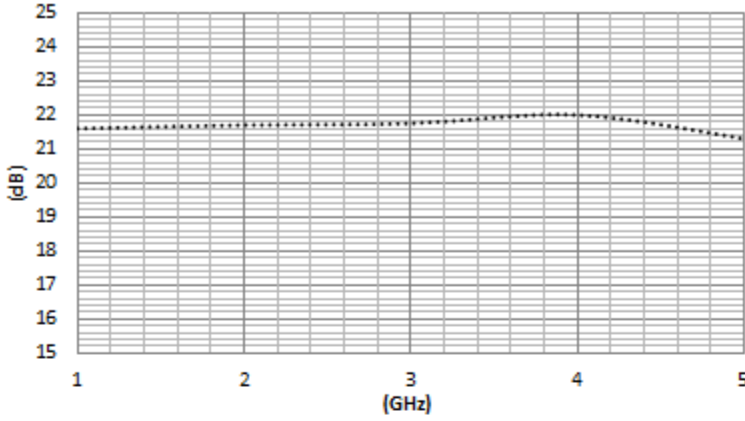
Note: Always use a 50 ohm output termination.

Mechanical & Electrical

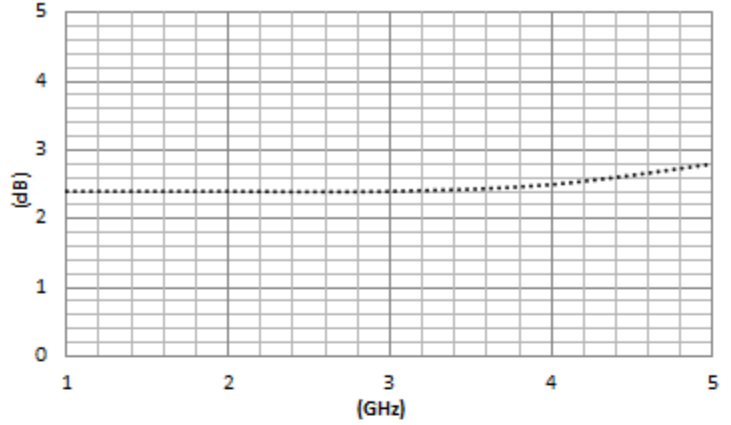
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	1.36" L x 0.66" W x 0.33" H
Housing Drawing	Customized H2L Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

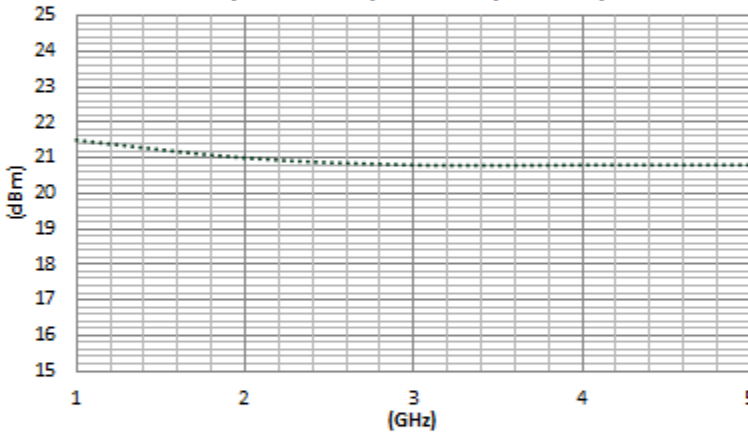
Gain



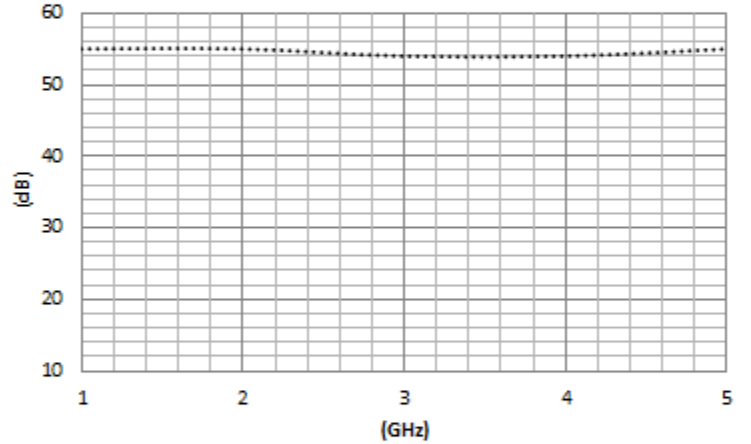
Noise Figure



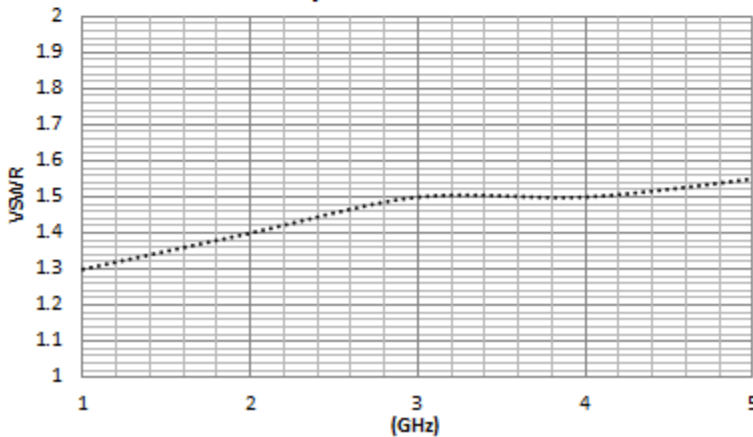
Output Power (1 dB Compression)



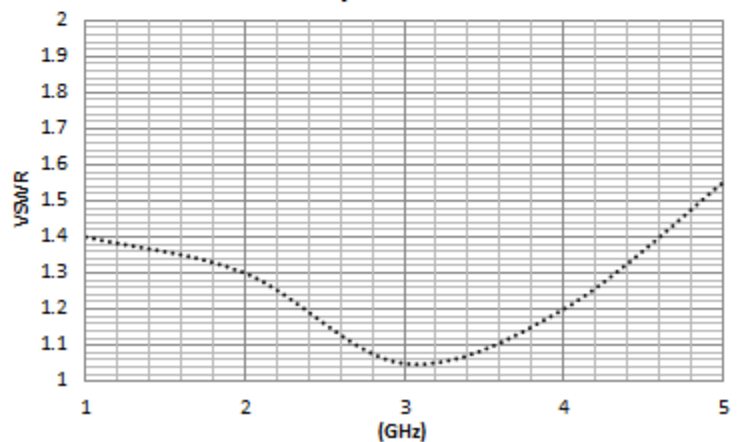
Reverse Isolation



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)

