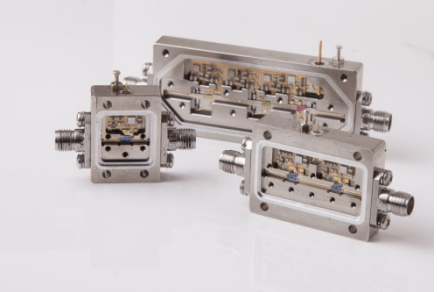
Model # BX9871

Standard Microwave Amplifier

Frequency Range: 1000 MHz to 1500 MHz



Features

- **Low Noise Figure: 3.5 dB**
- **Laser Sealed Housing**
- **High IP3: +37 dBm**
- **Field Replaceable Connectors**

Model BX9871 is a customizable amplifier covering 1000 MHz to 1500 MHz. This High Performance design utilizes a hermetically sealed internal package for superior environmental protection. This standard design may also be ordered in a MIL PRF 38534, STD-883 screened version (Model #SX9871). All specification ratings are based on measurements in a 50 Ω (ohm) system with a DC supply of 12 volts and a voltage tolerance of +/- 2%.

Technical Specifications

Parameter	Unit	Typical	Min/Max
Frequency Range	MHz	1000 - 1500 MHz	1000 - 1500 MHz
Gain	dB	18.5	18 Min / 19 Max.
Gain Flatness	dB	+/- 0.25 dB	---
Gain vs. Temperature*	dB	+/- 1.0 dB	+/- 2.0 dB Max.
Noise Figure	dB	3.5	4.0 Max
Output 3rd Order Intercept	dBm	37	36 Min.
Input VSWR	---	1.4:1	1.5:1 Max
Output VSWR	---	1.4:1	1.5:1 Max
Supply Voltage	volts	+12	+12
Supply Current	mA	240	250 Max

Absolute Maximum Ratings

Maximum (NO DAMAGE THRESHOLD) Ratings	
Storage Temperature	-55°C to +85°C
Operating (Case) Temperature	-28°C to +85°C
DC Voltage	+15 volts
Input Drive	+13 dBm

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

*Gain vs. Temperature measured and guaranteed from -20°C to +85°C

Mechanical & Electrical

Parameter	Specification
Specification Temperatures (Min/Max)	+25°C
Housing	0.820" L x 1.000" W x 0.300" H (Housing #088-00386)
RF Connectors	SMA Female Replaceable Connectors

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.	

1) Outlines drawing below is for reference only.(BX9871)