

## Description

LNA-1K1G low noise amplifier from HZ-THZ (also known as LNA) is featured in our extensive in-stock RF amplifier selection. Our connectorized low noise amplifier uses SMA connectors at 50 Ohm. HZ-THZ low noise amplifier has a minimum frequency of 1 KHz and maximum frequency of 1 GHz. The significantly low noise figure of this radio frequency amplifier is 1.2 dB with a typical gain of 42 dB. The output power P1dB of this LNA is 12 dBm.

LNA amplifier LNA-1K1G is rated at 15 Volts DC and 150 mA. Our low noise amplifiers are available in various configurations over different frequency bands to fit your needs, all of which shipped worldwide the same day.

## Features

- Broadband: 1 KHz to 1 GHz
- Noise Figure: 1.2 dB
- P1dB: 12 dBm
- Small Signal Gain: 42 dB typical
- 50 Ohm Input and Output Matched
- -40~+85°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply

## Applications

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- RF Pre-amplification

# Low Noise Amplifier

## LNA-1K1G

1 KHz to 1 GHz, 1.2 dB NF, 12 dBm P1dB, 42 dB Gain, SMA

# HZ-THZ

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.000001		1	GHz
Small Signal Gain		42	45	dB
Gain Flatness		±1.0		dB
Input VSWR		1.8	2.0	: 1
Output VSWR		1.5	1.8	: 1
Noise Figure		1.2	1.8	dB
Output Power P1dB		8	12	dBm
Output 3rd Intercept Point			25	dBm
Operating DC Current		110	150	mA
Operating DC Voltage		+15		Volts
Input Connector			SMA Female	
Output Connector			SMA Female	

Electrical Specification Notes:

Values at +25°C, sea level.

### Absolute Maximum Rating

Parameter	Rating	Units
DC Voltage	+14 to +16	Volts
Operating Temperature	-40 to +85	°C
Storage Temperature	-55 to +85	°C

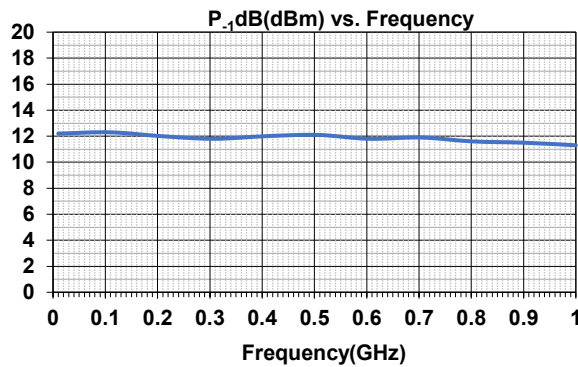
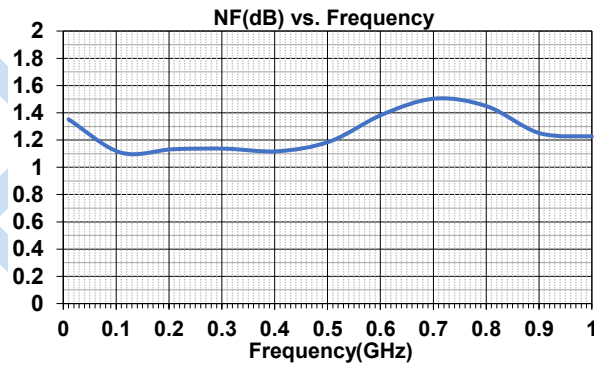
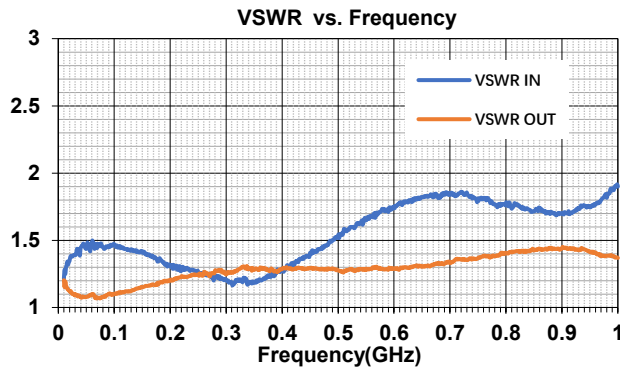
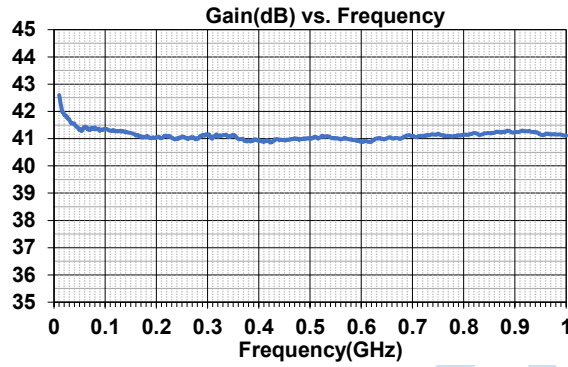
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HZ-THZ

## Typical Performance Data



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1 KHz to 1 GHz, 1.2 dB NF, 12 dBm P1dB, 42 dB Gain, SMA

### Mechanical Specifications

#### Size

Length 4.13 in [105.00 mm]  
Width 1.70 in [43.26 mm]  
Height 0.79 in [20.00 mm]

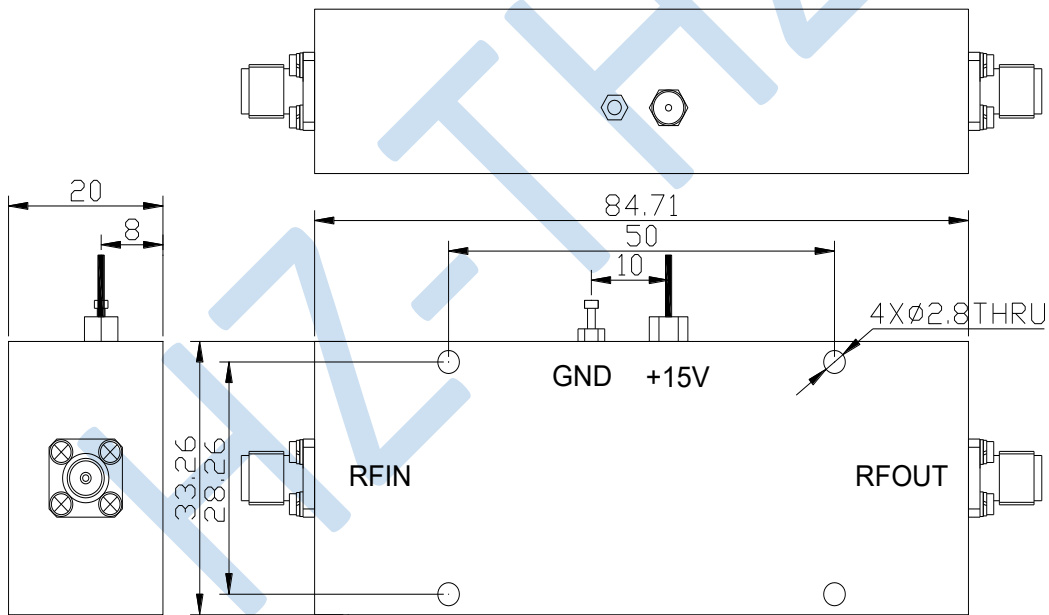
Weight 0.38 lbs [172.00 g]

Package Type Customized

### Outline Drawings

Unit: mm

Tolerance:  $\pm 0.05$  mm



### How To Order

#### LNA-1K1G

Pls send request to [sales@hz-thz.com](mailto:sales@hz-thz.com).