# **Low Noise Amplifier**

LNA-1MP5G

1 MHz to 500 MHz, 3.5 dB NF, 4 dBm P1dB, 15.8 dB Gain, SMA

**HZ-THZ** 

### **Description**

LNA-1MP5G 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 MHz and maximum frequency of 500 MHz. The significantly low noise figure of this radio frequency amplifier is 3.5 dB with a typical gain of 15.8 dB. The output power P1dB of this LNA is 4 dBm.

LNA amplifier LNA-1MP5G is rated at 15 Volts DC and 13 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 MHz to 500 MHz

■ Noise Figure: 3.5 dB

■ P1dB: 4 dBm

Small Signal Gain: 15.8 dB typical50 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

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## **Electrical Specifications**

Frequency Range         0.001         0.5         GHz           Small Signal Gain         15.8         16.3         dB           Gain Flatness         ±0.5         ±1         dB           Input VSWR         2.0         2.5         :1           Output VSWR         2.0         2.5         :1           Noise Figure         2.0         3.5         dB           Output Power P1dB         4         6         dBm
Gain Flatness $\pm 0.5$ $\pm 1$ dB           Input VSWR         2.0         2.5         : 1           Output VSWR         2.0         2.5         : 1           Noise Figure         2.0         3.5         dB
Input VSWR         2.0         2.5         : 1           Output VSWR         2.0         2.5         : 1           Noise Figure         2.0         3.5         dB
Output VSWR         2.0         2.5         : 1           Noise Figure         2.0         3.5         dB
Noise Figure 2.0 3.5 dB
Output Power P1dR / 6 dRm
Output 1 Ower 1 Lub 4 0 ubili
Output 3rd Intercept Point 16 18 dBm
Operating DC Current 13 15 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	+10 to +15	Volts
Operating Temperature	-40 to +85	${}^{\circ}\! \mathbb{C}$
Storage Temperature	-55 to +85	$^{\circ}\!\mathbb{C}$

Rev. 0

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### LNA-1MP5G

**HZ-THZ** 

Rev. 0

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## **Mechanical Specifications**

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 Length
 1.97 in [50.15 mm]

 Width
 1.74 in [44.14 mm]

 Height
 0.75 in [19.05 mm]

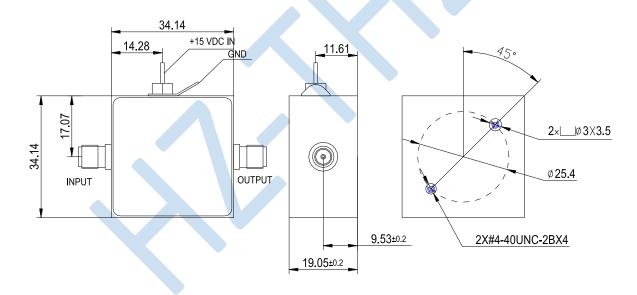
Weight 0.38 lbs [172.00 g]

Package Type Customized

## **Outline Drawings**

Unit: mm

Tolerance: ±0.05 mm



#### **How To Order**

#### LNA-1MP5G

Pls send request to sales@hz-thz.com.