

## Description

LNA-500M6G 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 500 MHz and maximum frequency of 6 GHz. The significantly low noise figure of this radio frequency amplifier is 3 dB with a typical gain of 45 dB. The output power P1dB of this LNA is 18 dBm.

LNA amplifier LNA-500M6G is rated at +15 Volts DC and 160 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: 500 MHz to 6 GHz
- Noise Figure: 3 dB
- P1dB: 18 dBm
- Small Signal Gain: 45 dB typ
- 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-500M6G

500 MHz to 6 GHz, 3 dB NF, 18 dBm P1dB, 45 dB Gain, SMA

# HZ-THZ

### Electrical Specifications

| Description                | Minimum | Typical | Maximum    | Units |
|----------------------------|---------|---------|------------|-------|
| Frequency Range            | 0.5     |         | 6          | GHz   |
| Small Signal Gain          | 40      | 45      |            | dB    |
| Gain Flatness              |         | ±1.5    | ±2         | dB    |
| Input VSWR                 |         | 1.5     | 2.0        | : 1   |
| Output VSWR                |         | 1.5     | 2.0        | : 1   |
| Noise Figure               |         | 3       | 3.5        | dB    |
| Output Power P1dB          | 13      | 18      |            | dBm   |
| Output 3rd Intercept Point |         | 28      |            | dBm   |
| Operating DC Current       |         | 160     | 200        | 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            | +12 to +16  | Volts |
| RF Input Power        | +10         | dBm   |
| Operating Temperature | -40 to +85  | °C    |
| Storage Temperature   | -55 to +125 | °C    |

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HZ-THZ

## Mechanical Specifications

### Size

Length 2.60 in [66.00 mm]  
Width 0.98 in [25.00 mm]  
Height 0.39 in [10.00 mm]

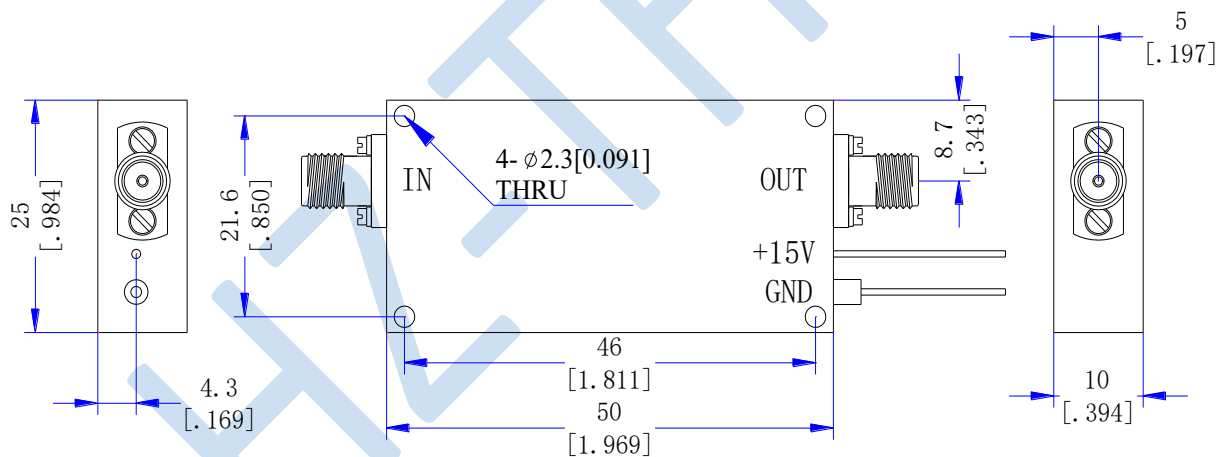
Weight 0.38 lbs [172.00 g]

Package Type Customized

## Outline Drawings

Unit: mm

Tolerance:  $\pm 0.05$  mm



## How To Order

LNA-500M6G

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