



AT-LNA-5566-3506VG

55-66GHz Low Noise Amplifier

V Band Low Noise Amplifier

55-66GHz, High Gain=35db, NF=6dB, 1.85mm



Product Overview

AT-LNA-5566-3506VG is Low Noise Amplifier with 6dB Noise Figure in the frequency of 55-66GHz. The DC power requirement is +5V/150mA. The module is with 1.85mm Female

AT Microwave can provide all kinds of coaxial low noise amplifiers, with frequency from 0.01-67GHz, gain from 20 to 66dB, Pout from +5 to +27dBm, and connectors from SMA to 1.85mm.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 55-66GHz
- ✓ Small signal gain: 35dB
- ✓ Noise Figure: 6dB
- ✓ Single Power Supply

Application

- ✓ V Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

| Parameter | Min | Typical | Max |
|--------------------|------|----------|-------|
| Frequency | | 55-66GHz | |
| Gain | 32dB | 35dB | |
| NF | | 6dB | 8dB |
| P1dB | | +10dBm | |
| Psat | | +12dBm | |
| Drain Supply | | +5V | +8V |
| Current | | 150 mA | 200mA |
| Input Return Loss | | -7 dB | |
| Output Return Loss | | -7 dB | |
| Spec Temp | | 25C | |





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Mechanical Information

| Item | Description |
|---------------------------|---------------|
| Input Port | 1.85mm Female |
| Output Port | 1.85mm Female |
| Case Material | Copper |
| Finish | Gold Plated |
| Package Sealing | Epoxy Sealed |
| Weight (Without Heatsink) | 50g |
| Size: | 30x30x14 mm |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------------|--------------|
| Drain Supply | +13V |
| RF Input Power | +10dBm |
| Operating Temperature(note) | -20 to +70C |
| Storage Temperature | -65 to +300C |

Note: -55 to +85C is available according to request.

Caution:

Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

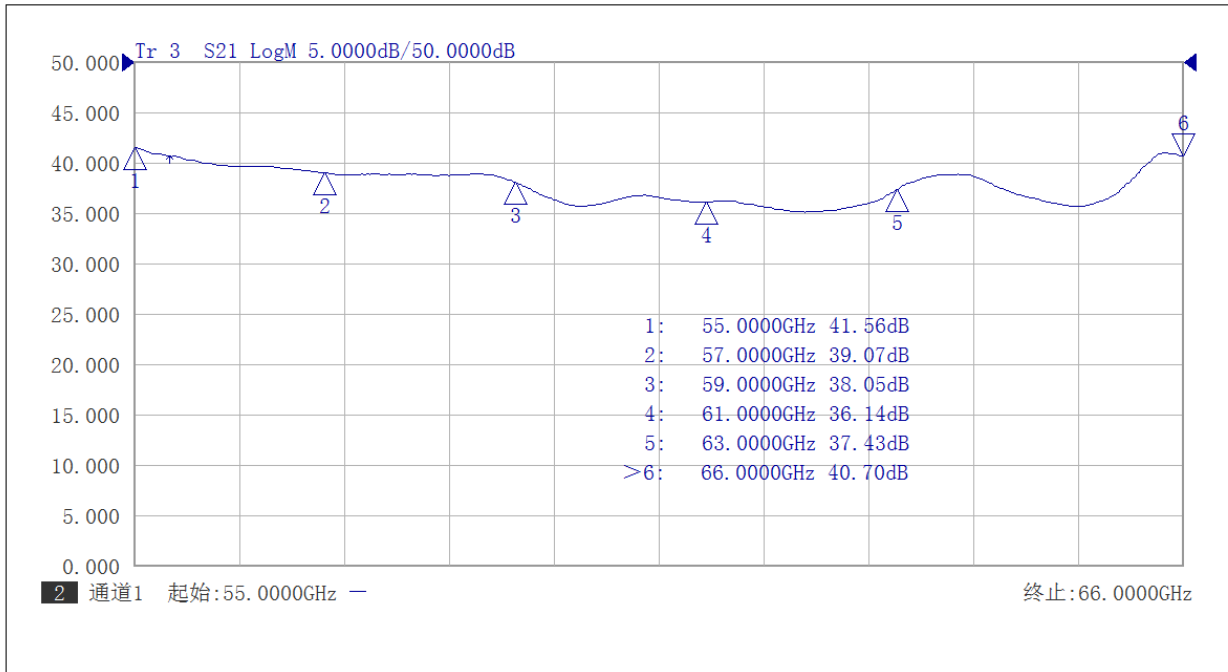
Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

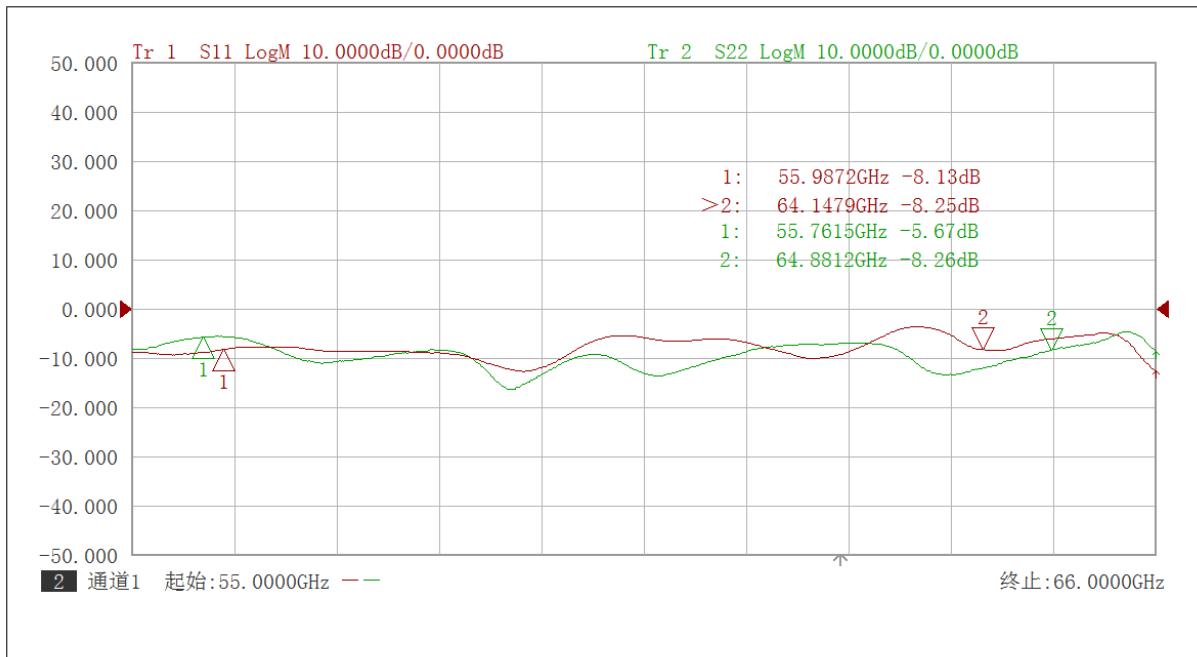


Test Data (25C)

Please note that test curves will vary slightly from unit to unit.

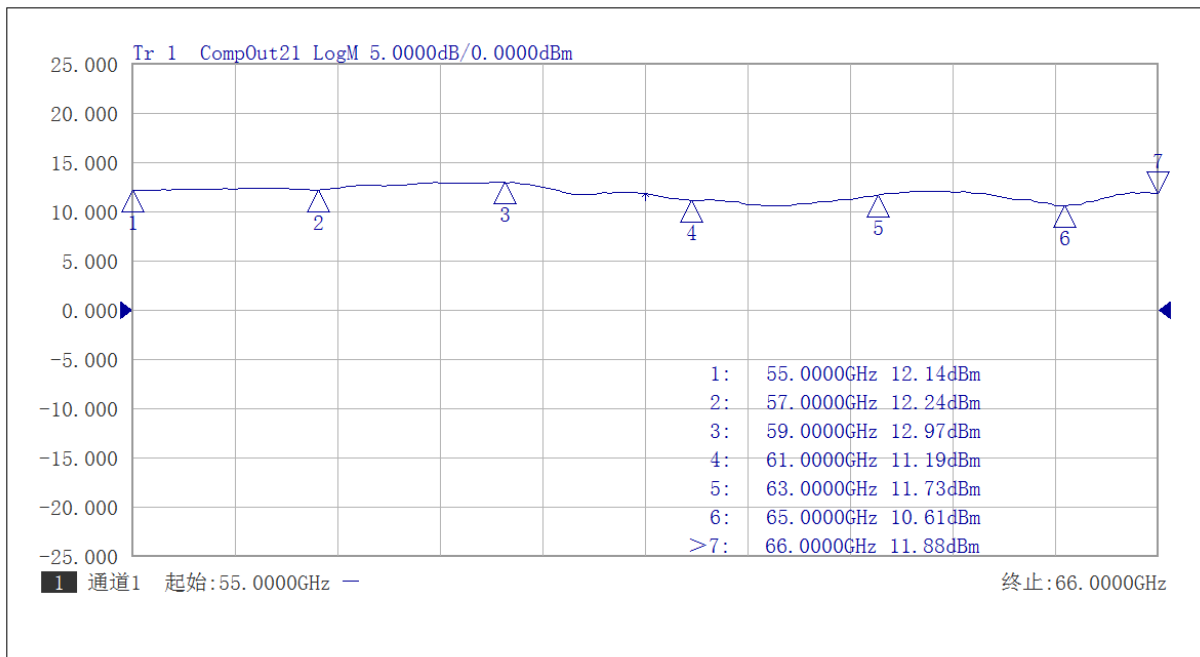


Gain vs Frequency

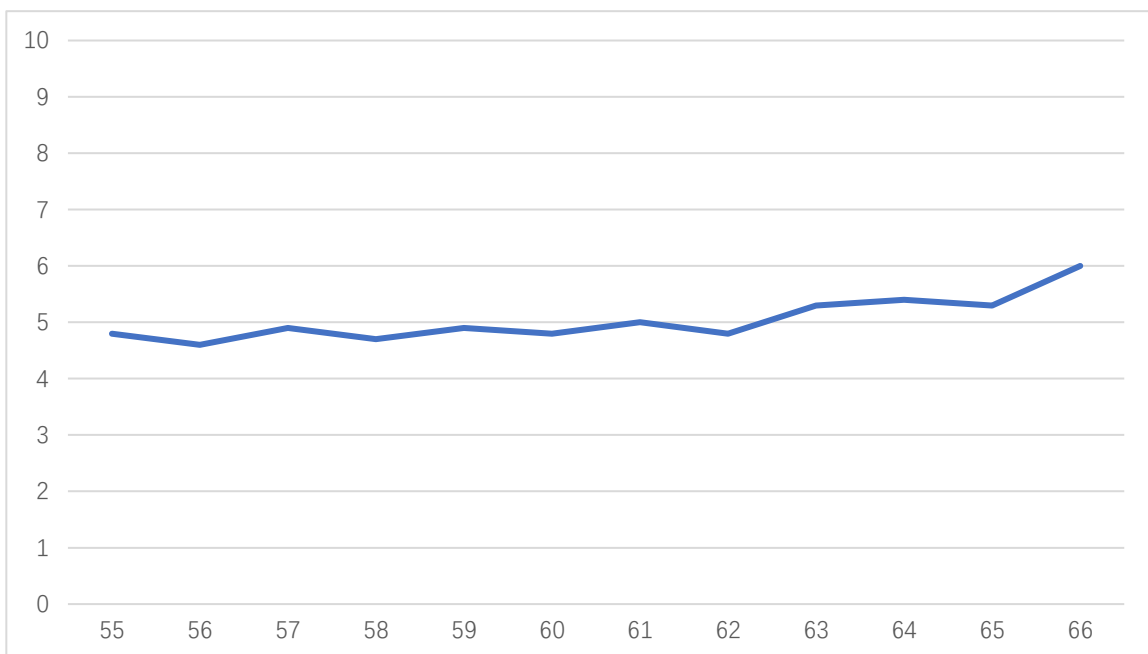


Return Loss vs Frequency





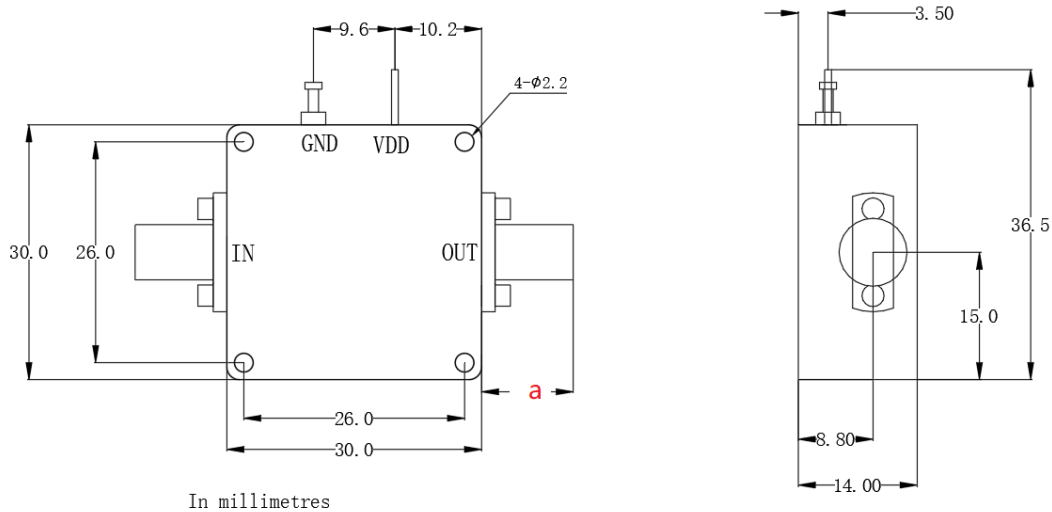
P1db vs Frequency



NF vs Frequency



Dimension: (unit in mm)



| | <26.5GHz | <40GHz | <50GHz | <67GHz |
|-------------|----------|--------|--------|--------|
| Connector | SMA | 2.92mm | 2.4mm | 1.85mm |
| Length of a | 9.4mm | 9.5mm | 10.8mm | 11.3mm |

Note: Female Default. Contact with us for other types.

