

U Band Low Noise Amplifier



Product Overview

AT-LNA-4060-1606VC is Low Noise Amplifier with 5dB Noise Figure in the frequency of 40-60GHz. The DC power requirement is +5V/100mA. 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 60dB, Pout from +5 to +27dBm, and connectors from SMA to 1.85mm.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 40-60GHz
- ✓ Small signal gain: 16dB
- ✓ Noise Figure: 6dB
- ✓ Single Power Supply

Application

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

Key Features

| Parameter | Min | Typical | Max |
|--------------------|-------|----------|--------|
| Frequency | | 40-60GHz | |
| Gain | 14dB | 16dB | |
| Gain Flatness | | +/-1.5dB | +/-3dB |
| NF | | 6dB | 8dB |
| P1dB | +7dBm | +8dBm | |
| Psat | +8dBm | +10dBm | |
| Drain Supply | | +5V | +8V |
| Current | | 100 mA | 160mA |
| Input Return Loss | | -5 dB | |
| Output Return Loss | | -5 dB | |
| Spec Temp | | 25C | |





AT-LNA-4060-1606VC

40-60GHz Low Noise Amplifier

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 | 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 +150C |

Note: -40 to +85C is available according to request.

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.

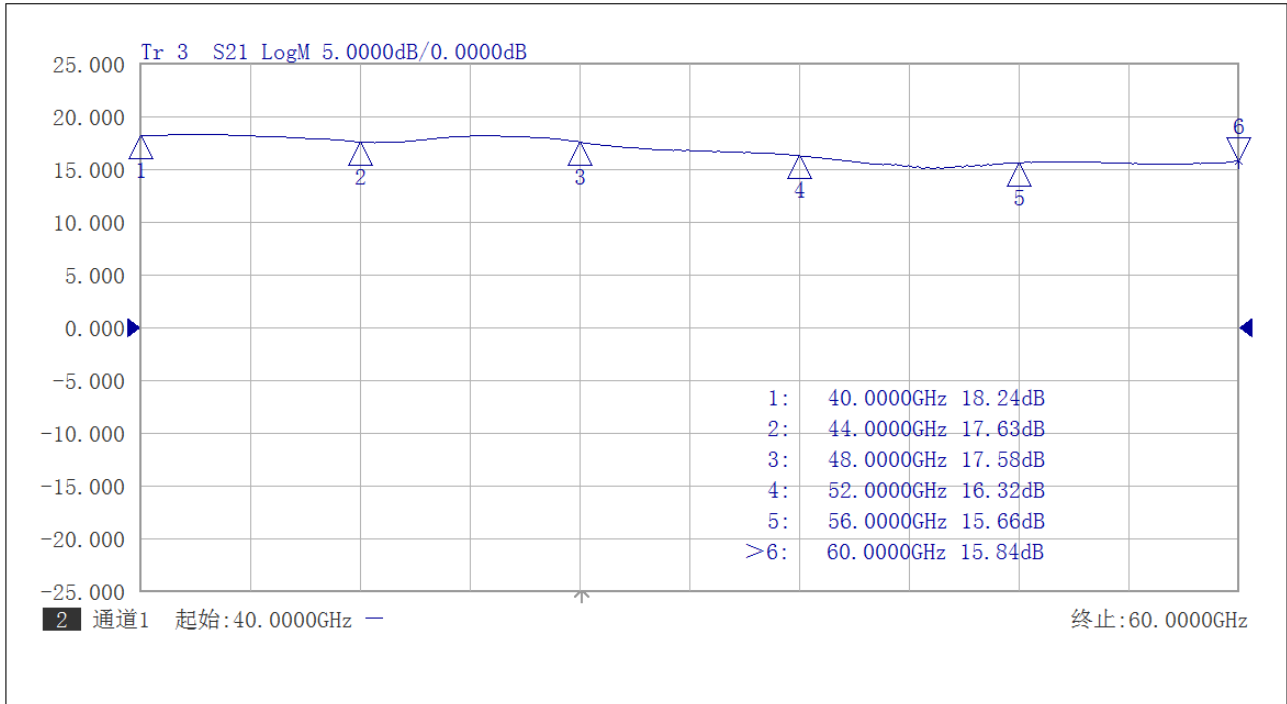
Part Number Selection Guide

| Item | Description |
|----------------|---|
| PN | Stand Module with DC Power Supply |
| PN-LCBT | L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter |

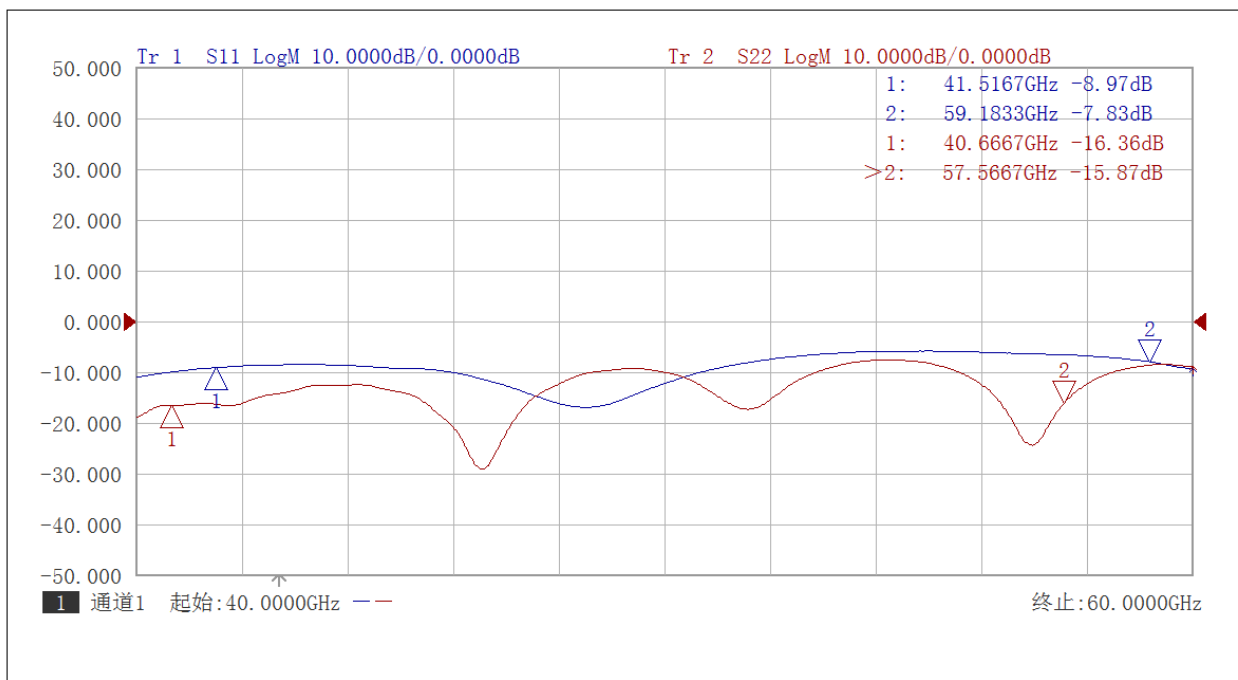


Test Data (25C)

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

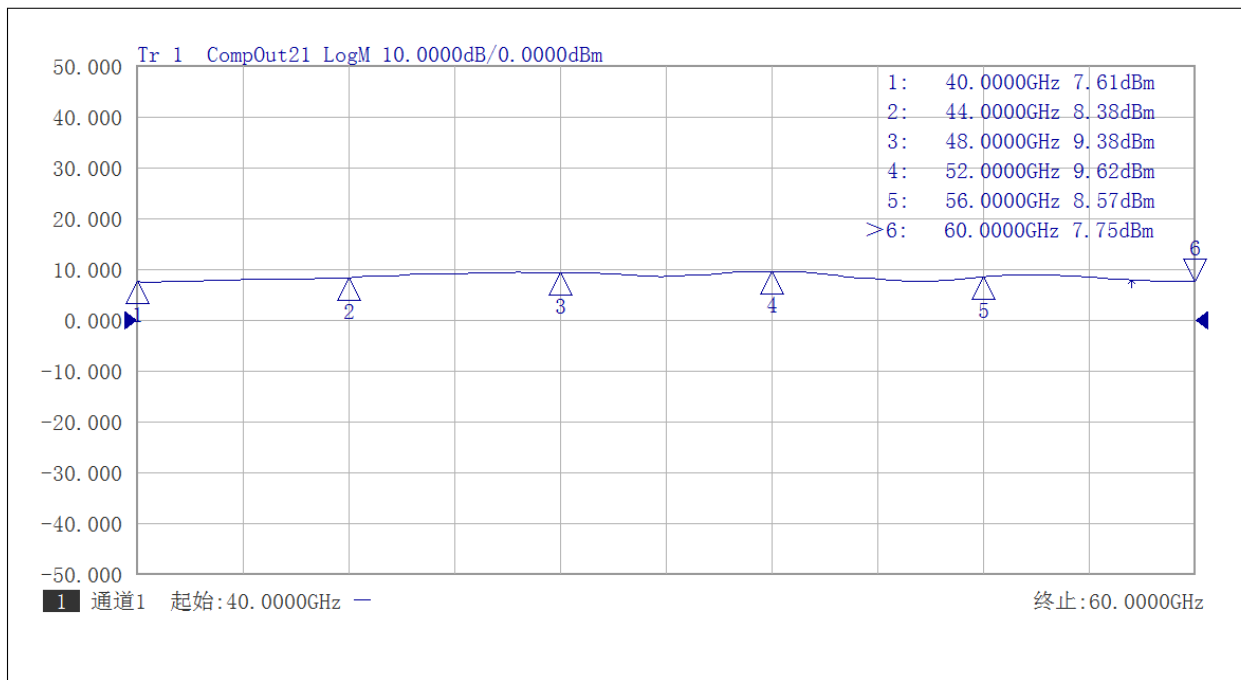


Gain vs Frequency

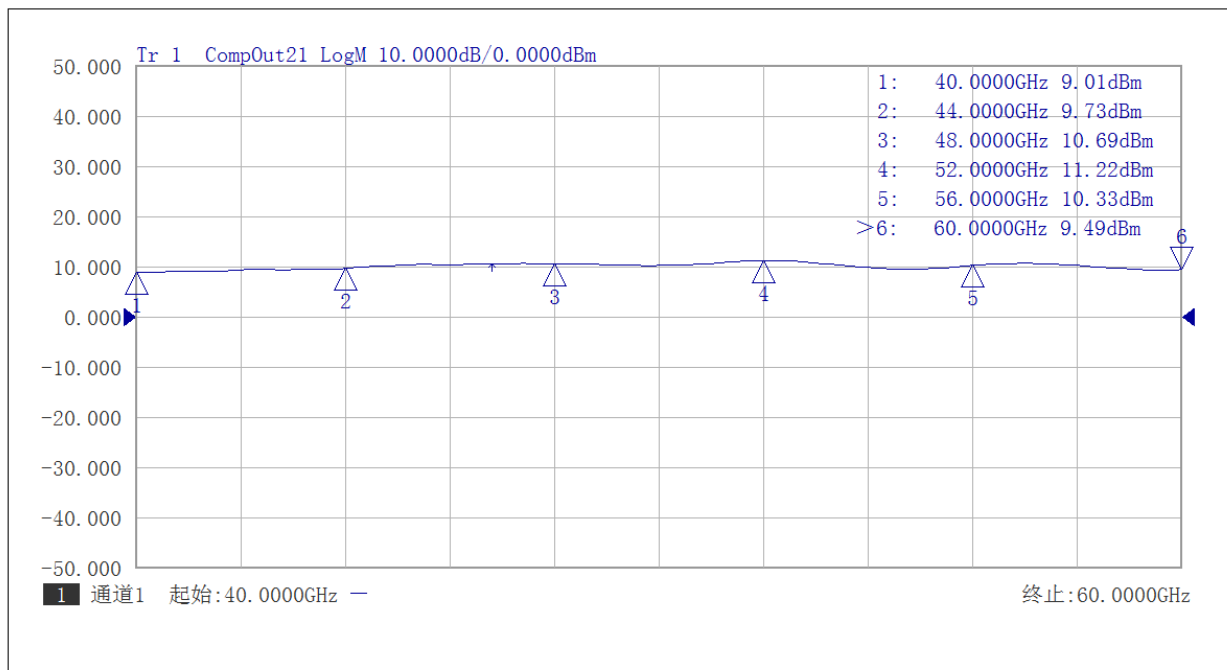


Return Loss vs Frequency



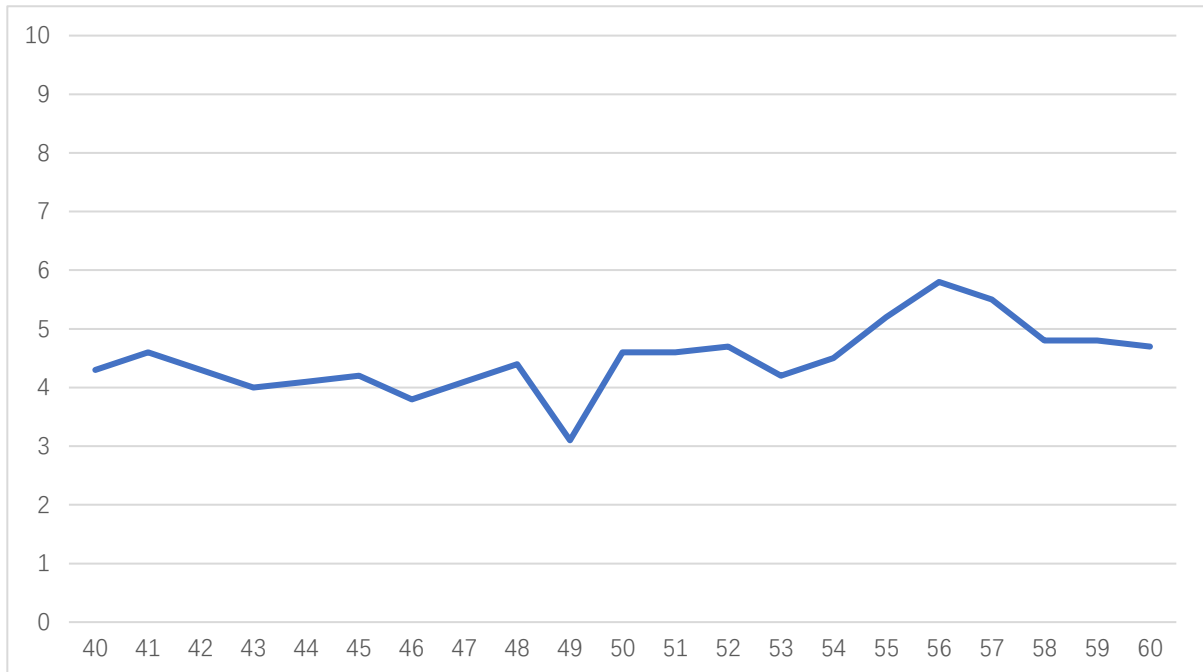


P1db vs Frequency



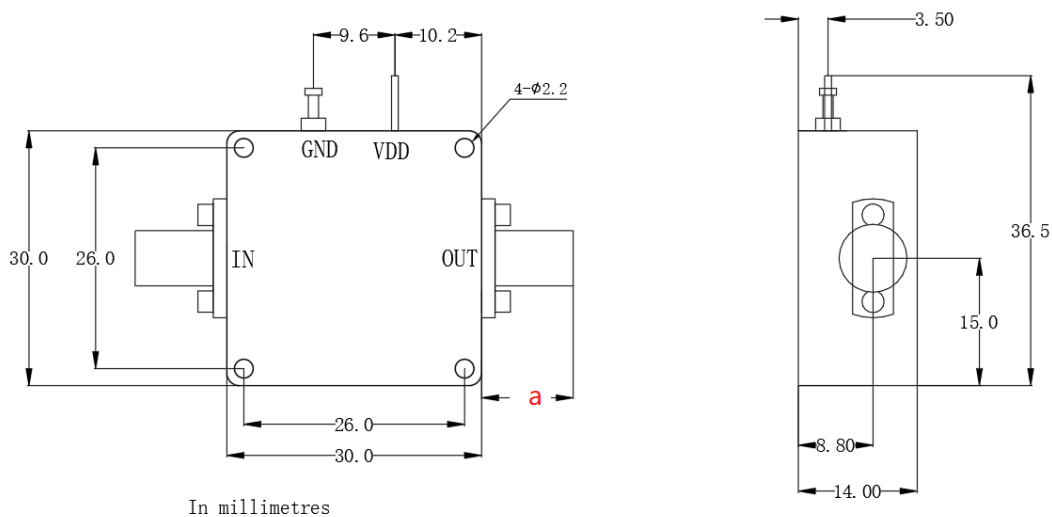
P3db vs Frequency





NF TEST vs Frequency

Dimension: (unit in mm)



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

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

