



AT-LNA-4577-3825T

Full V Band Low Noise Amplifier

45-77GHz Broadband Low Noise Amplifier Super Low NF=2.5dB, High Gain=38dB



Product Overview

AT-PA-4577-3825T is low noise amplifier with 38dB gain in the frequency of 45-77GHz. The DC power requirement is +5V/80mA. The module is with a standard WR-15 waveguide.

Lower gain modules with 18dB gain modules is available as PN: AT-LNA-4577-1825T.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 45-77GHz
- ✓ NF: 2.5dB
- ✓ Small signal gain: 38dB
- ✓ Single Power Supply

Application

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

Key Features

| Parameter | Min | Typical | Max |
|--------------------|-----|----------|-------|
| Frequency | | 45-77GHz | |
| Gain | 35 | 38dB | |
| Drain Supply | | +5V | +8V |
| NF | | 2.5 dB | 3.5dB |
| P1Db | | +5dBm | |
| Psat | | +8dBm | |
| Current | | 80mA | |
| Input Return Loss | | -8dB | |
| Output Return Loss | | -8dB | |
| Spec Temp | | 25C | |





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Mechanical Information

| Item | Description |
|---------------------------|-------------|
| Input Port | WR-15 |
| Output Port | WR-15 |
| Case Material | Copper |
| Finish | Gold Plated |
| Weight (Without Heatsink) | 135g |
| Size: | See outline |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +9V |
| RF Input Power | +5dBm |
| Operating Temperature | 0 to +50C |
| Storage Temperature | -65 to +150C |

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 |



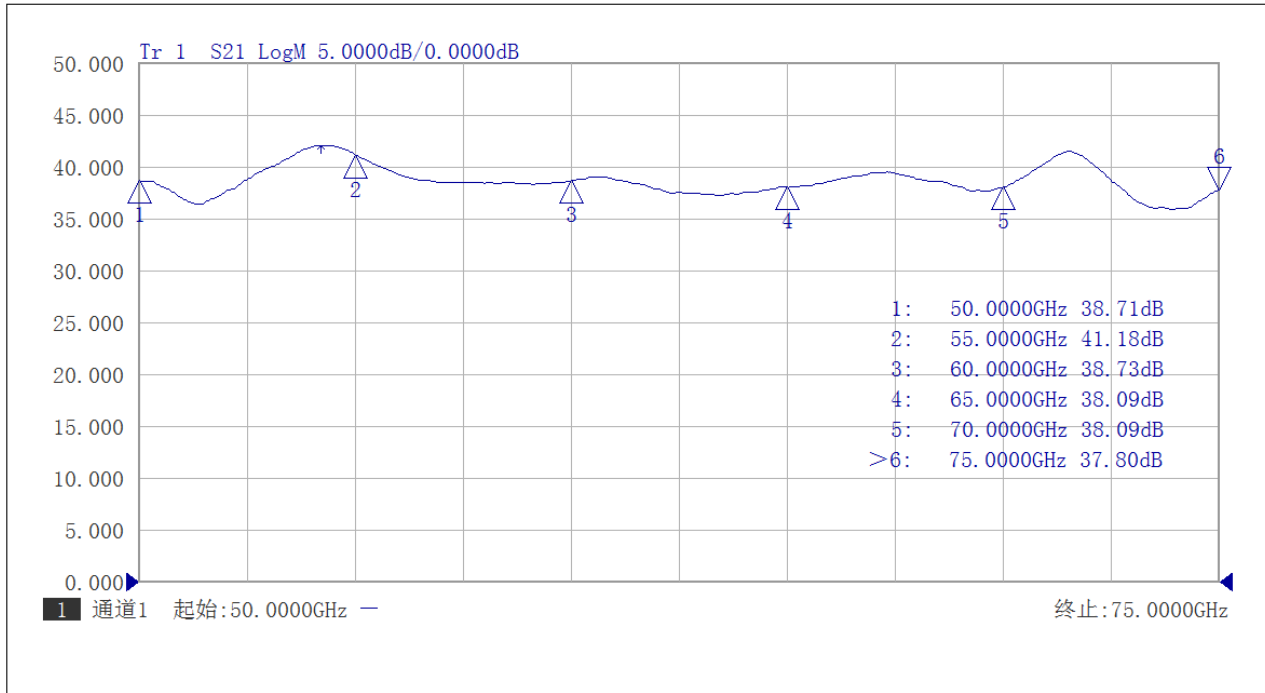


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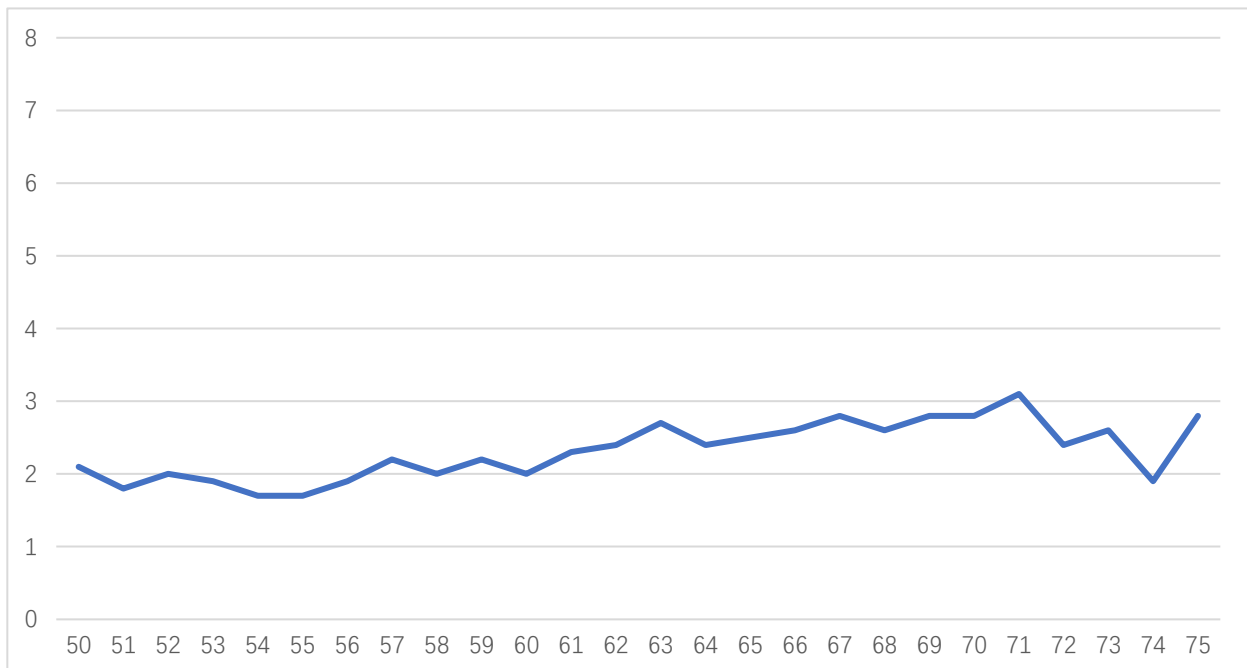
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Test Data (25C)

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

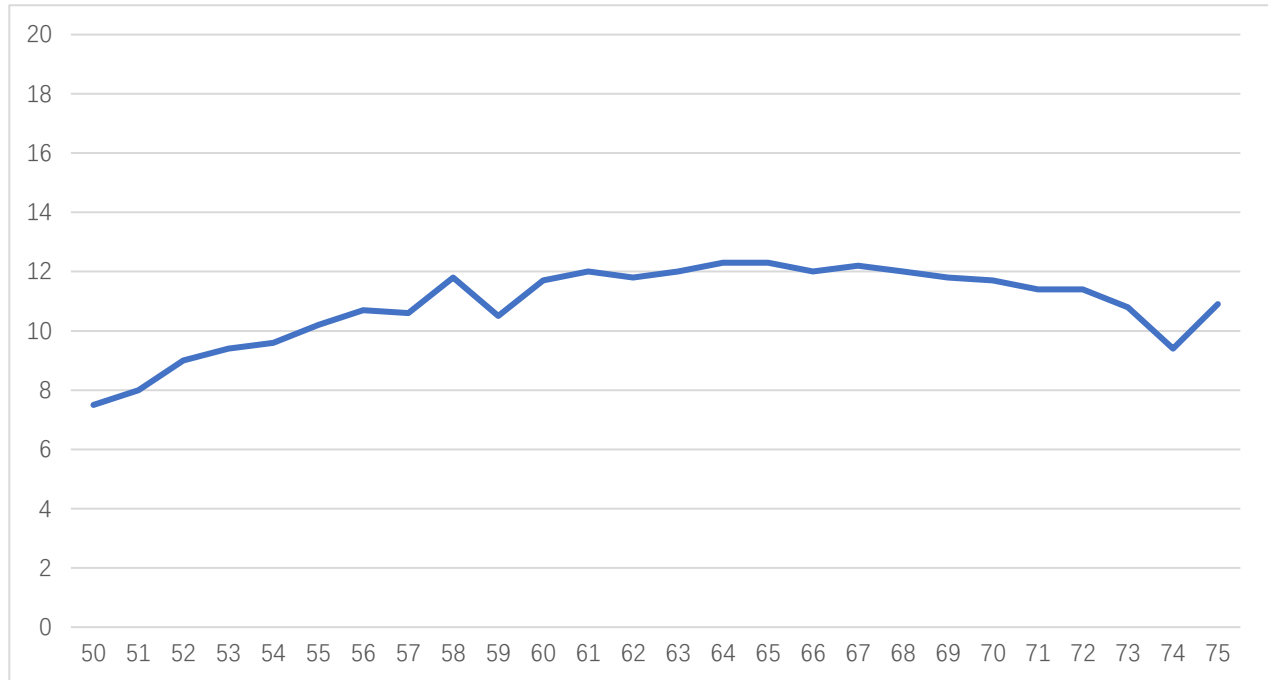


Gain vs Frequency



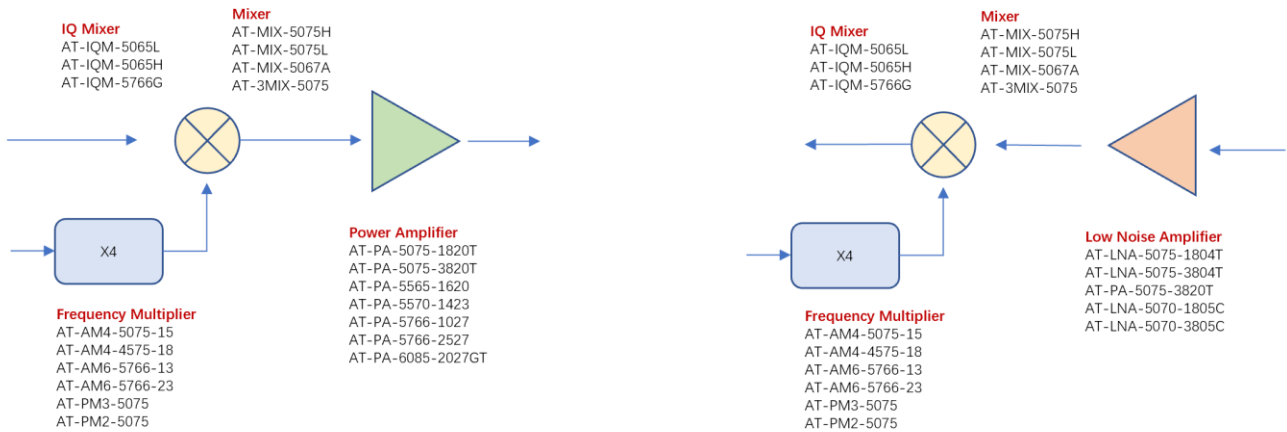
NF vs Frequency





Psat vs Frequency

V Band 50-75GHz



Dimension: (unit in mm)

