

# AT-LNA-5075-1804T

Full V Band Low Noise Amplifier

## 50-75GHz Broadband Low Noise Amplifier

### Super Low NF=4dB



### Product Overview

AT-LNA-5075-1804T is low noise amplifier with 18dB gain in the frequency of 50-75GHz. The DC power requirement is +5V/50mA. The module is with a standard WR-15 waveguide.

High gain modules with 35dB gain modules is available, PN: AT-LNA-5075-3804T.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Advantages

- ✓ Frequency: 50-75GHz
- ✓ NF: 4dB
- ✓ Small signal gain: 18dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		50-75GHz	
Gain	15	18dB	
Drain Supply		+5V	+8V
NF		4 dB	5dB
P1dB		+5dBm	
Psat		+8dBm	
Current		50 mA	
Input Return Loss		-8dB	
Output Return Loss		-12dB	
Spec Temp		25C	





# AT-LNA-5075-1804T

Full V Band Low Noise Amplifier

## Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	40x25x20 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+10dBm
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.

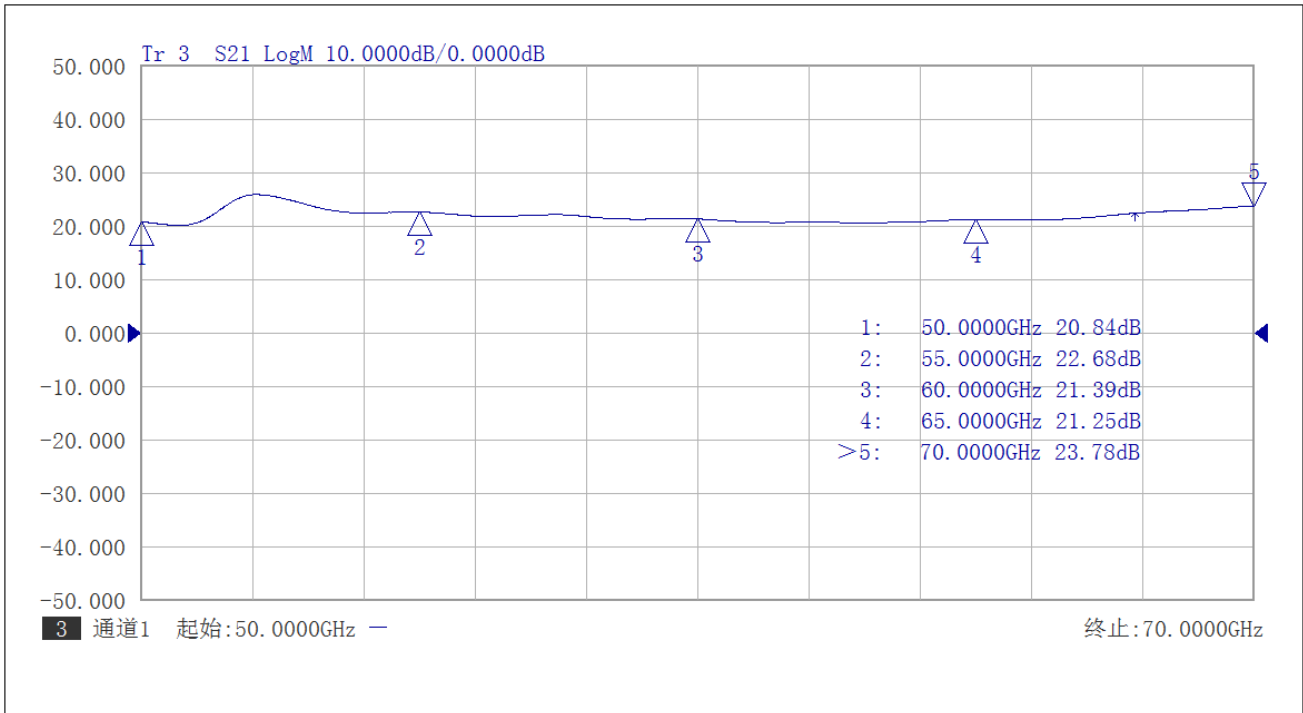
## Part Number Selection Guide

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

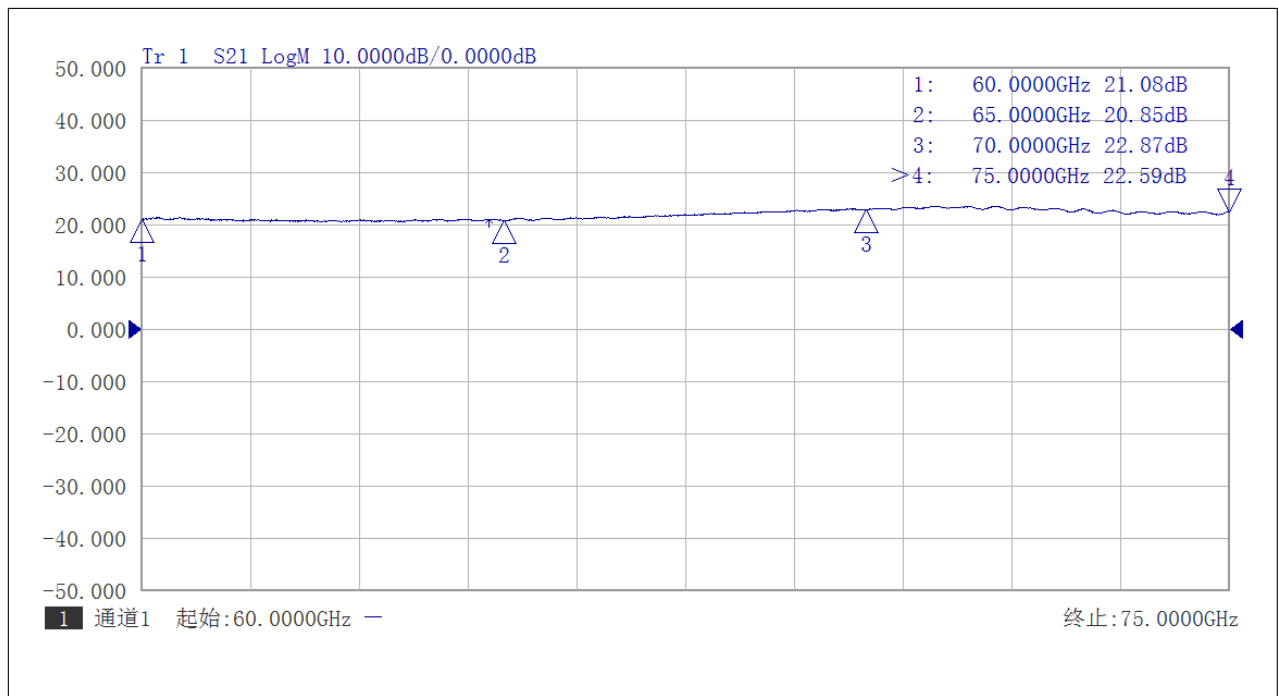


## Test Data (25C)

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

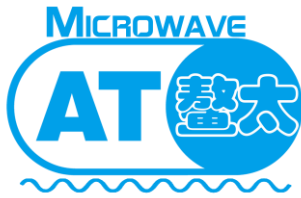


Gain vs Frequency 50-70GHz



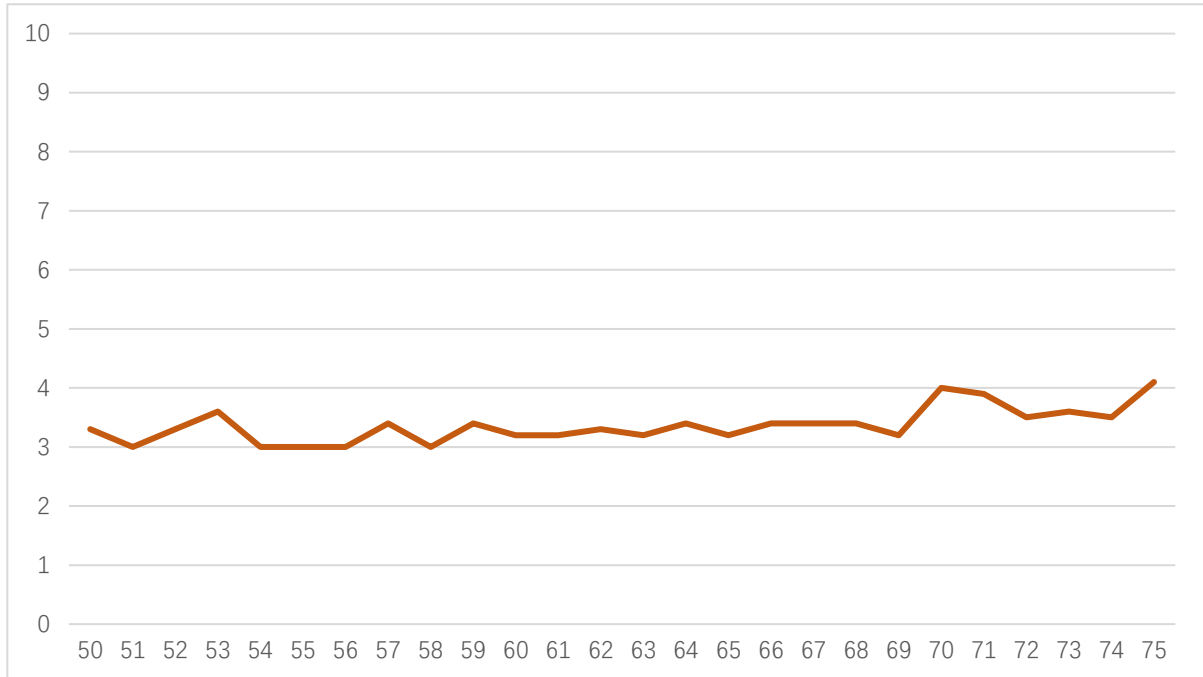
Gain vs Frequency 60-75GHz



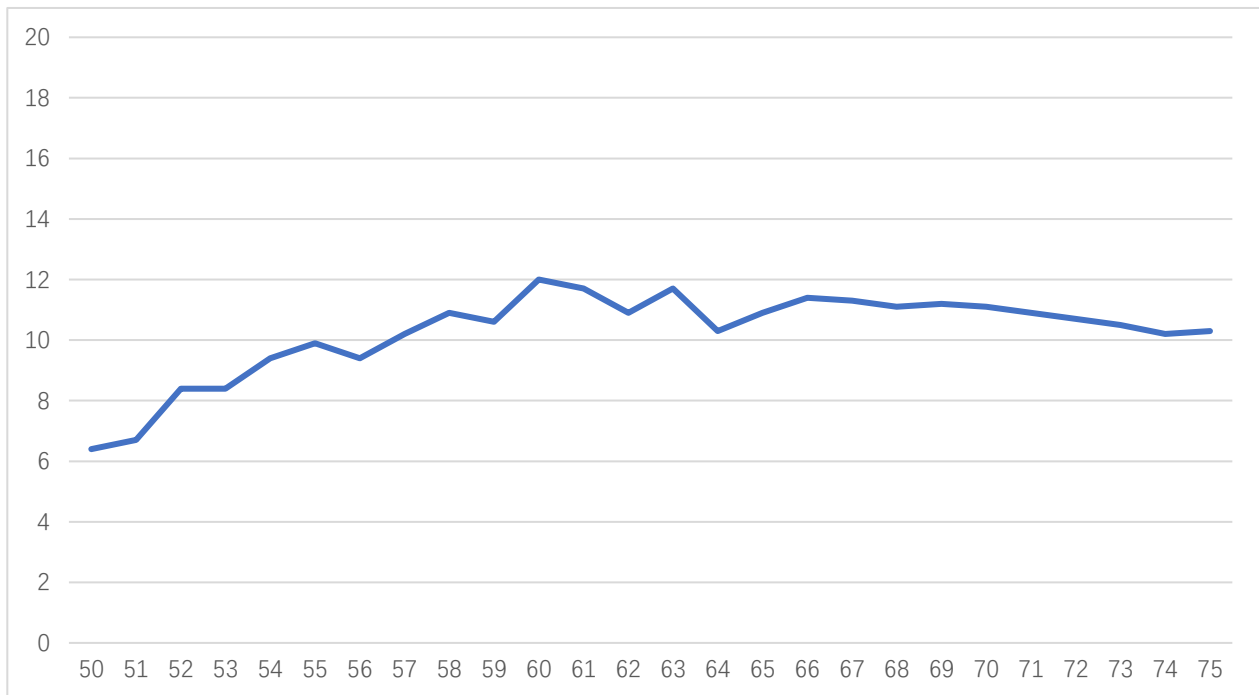


# AT-LNA-5075-1804T

Full V Band Low Noise Amplifier



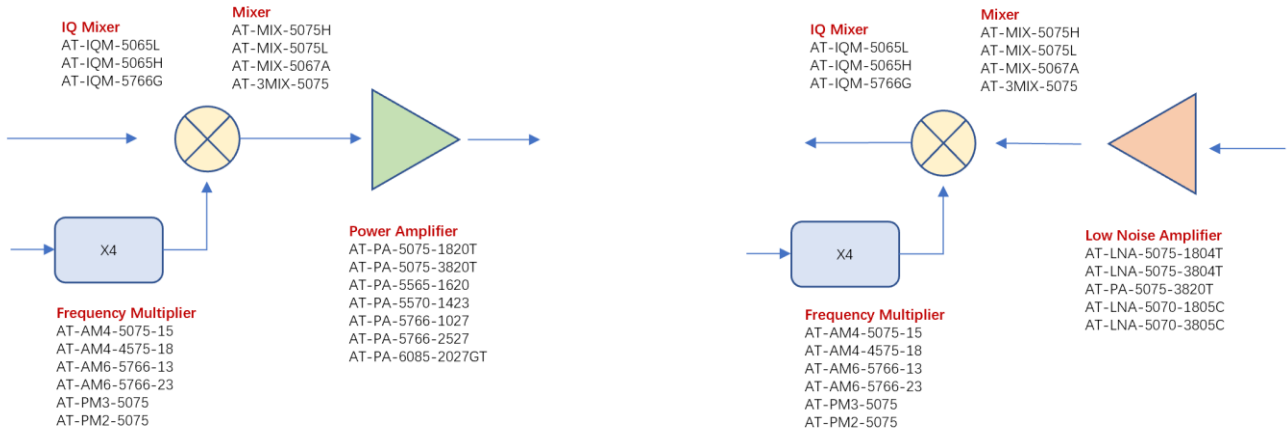
NF vs Frequency



Psat vs Frequency



## V Band 50-75GHz



## Dimension: (unit in mm)

