

### Full E Band Low Noise Amplifier

2022-10-1

### 60-90GHz, High gain=38dB, NF=5dB



#### Product Overview

AT-LNA-6090-3805T is an High Gain full E Band low noise amplifier operating in the 60-90GHz frequency range with super low NF=5dB. The LNA is packaged in a waveguide module using industry standard WR-12.

GaAs pHEMT MMIC technology LNA Chip is used, which ensures reliable and repeatable unit-to-unit result.

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

#### Advantages

- ✓ Frequency: 60-90GHz
- ✓ Gain: 38dB
- ✓ NF: 5dB
- ✓ Single Power Supply

#### Application

- ✓ E band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

#### Key Features

Parameter	Min	Typical	Max
Frequency		60-90GHz	
Gain	35	38dB	
Noise Figure		5dB	7dB
Drain Supply		+5V/180mA	+8V
P1dB		+8dBm	
Psat		+10dBm	
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	





# AT-LNA-6090-3805T

60-90GHz 38dB Gain Low Noise Amplifier

## Mechanical Information

Item	Description
Input Port	WR-12 with UG-387/U anti-cocking Flange.
Output Port	WR-12 with UG-387/U anti-cocking Flange.
Case Material	Copper
Finish	Gold Plated
Weight	100g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+10dBm
Operating Temperature	0 to +50C
Storage Temperature	-45 to +85C

## Notes:

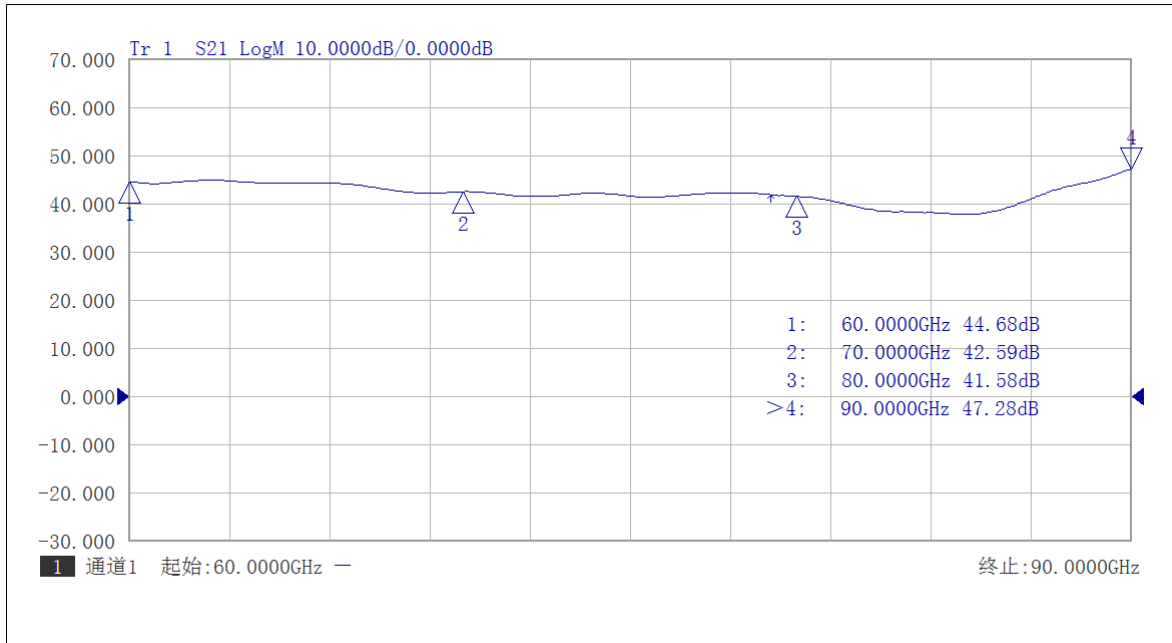
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

## Part Number Selection Guide

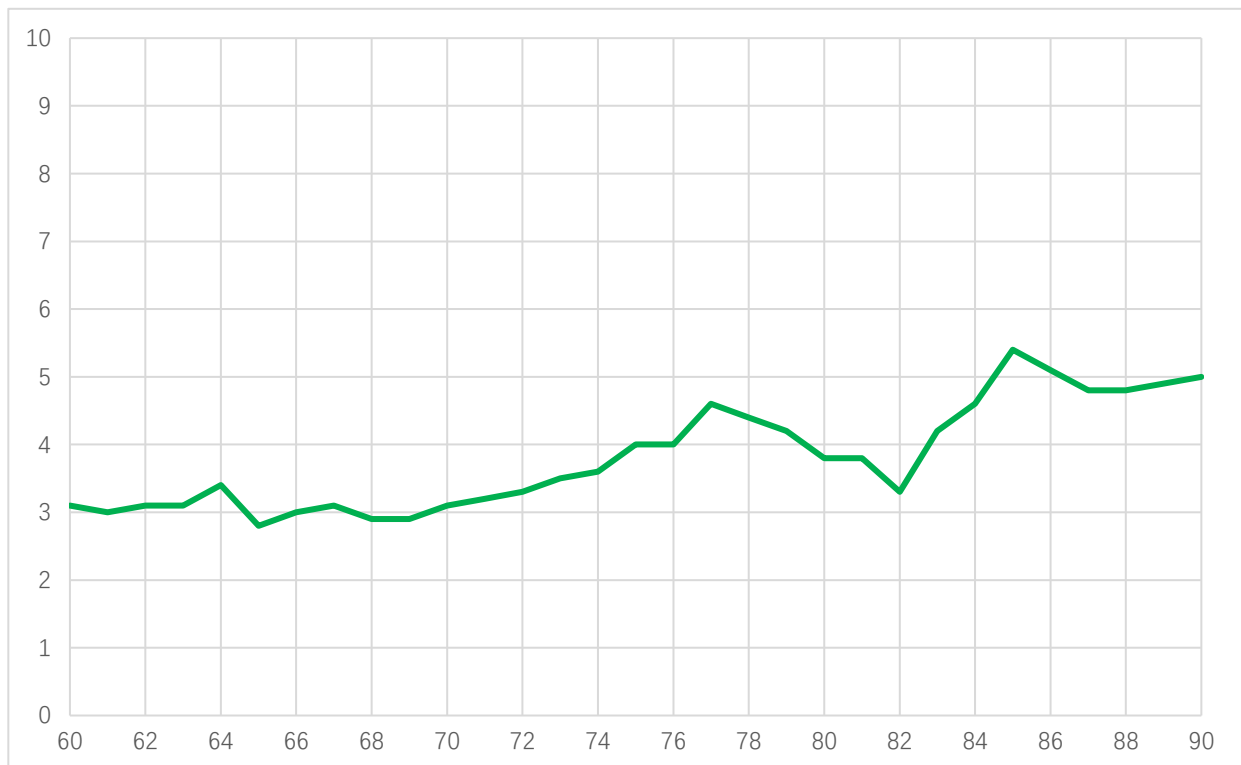
Item	Description
PN	Stand Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter



### Test Data(25C)



Gain vs Frequency



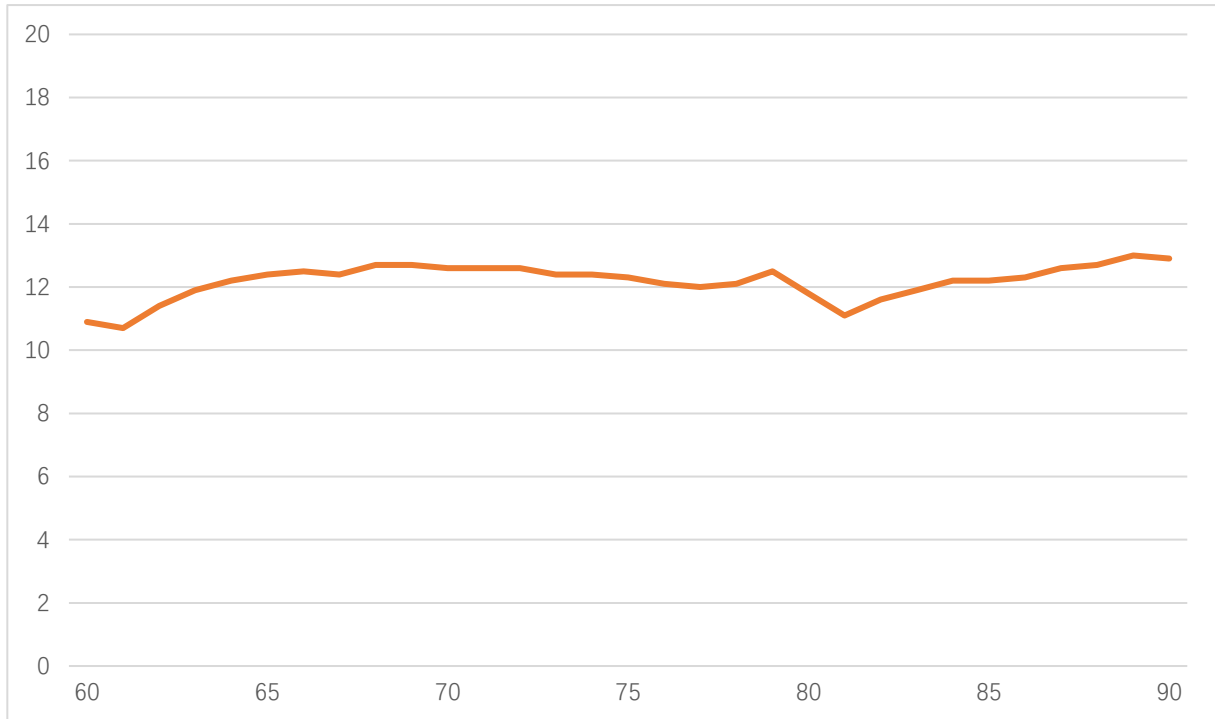
NF vs Frequency





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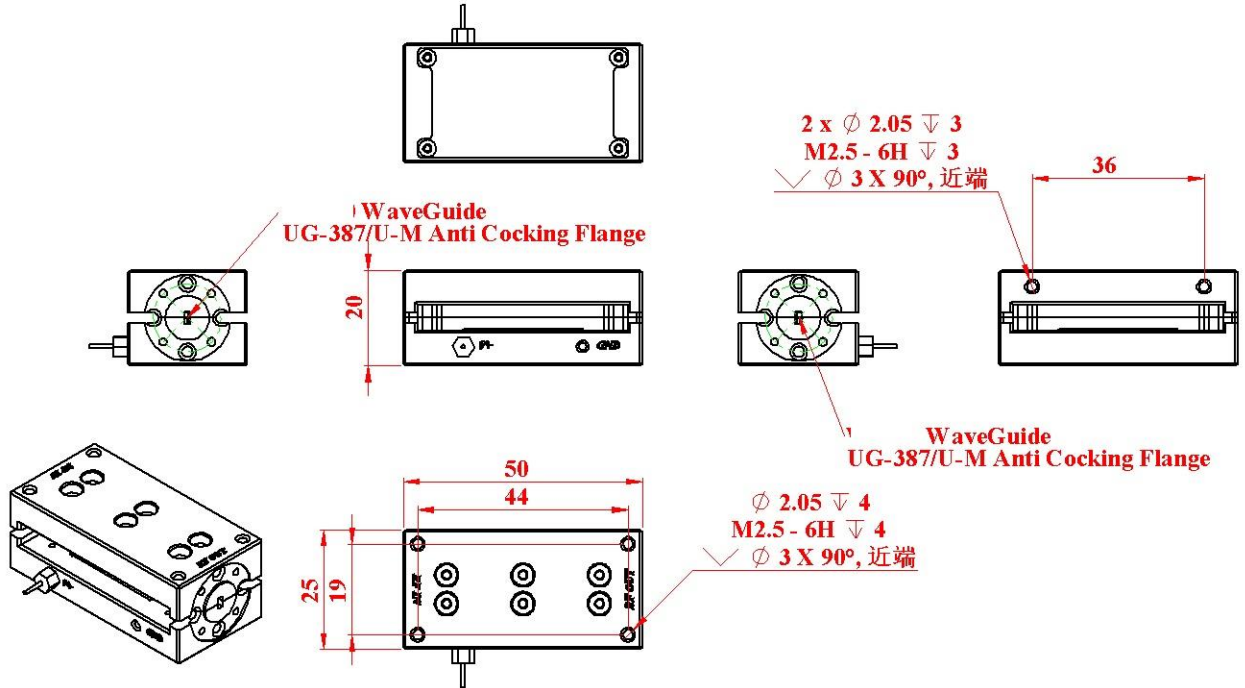
60-90GHz 38dB Gain Low Noise Amplifier



Psat vs Frequency



### Dimension (mm)



### PCN

Date	Description
2022-10-1	Outline updated with anti-cocking flange. All RF Performance un-changed.

