

### 40-60GHz Broadband Low Noise Amplifier

2020-11-9



### Product Overview

AT-LNA-4060-3805C is low noise amplifier with 38dB gain in the frequency of 40-60GHz. The DC power requirement is +5V/300mA. The module is with a standard WR-19 waveguide.

The LNA has high gain, high linearity, low input/output return loss and flat gain response.

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

### Advantages

- ✓ Frequency: 40-60GHz
- ✓ Small signal gain: 38dB
- ✓ NF 5dB
- ✓ 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	35	38dB	
Drain Supply		+5V	+8V
NF		5dB	
Input Power		-30dBm	-20dBm
P <sub>1</sub>		+15dBm	
P <sub>sat</sub>		+16dBm	
Current		300 mA	
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Spec Temp		25C	





# AT-LNA-4060-3805C

U Band Low Noise Amplifier

## Mechanical Information

Item	Description
Input Port	WR-19
Output Port	WR-19
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	180g
Size:	50x30x30 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+8V
RF Input Power	-10dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

### 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.

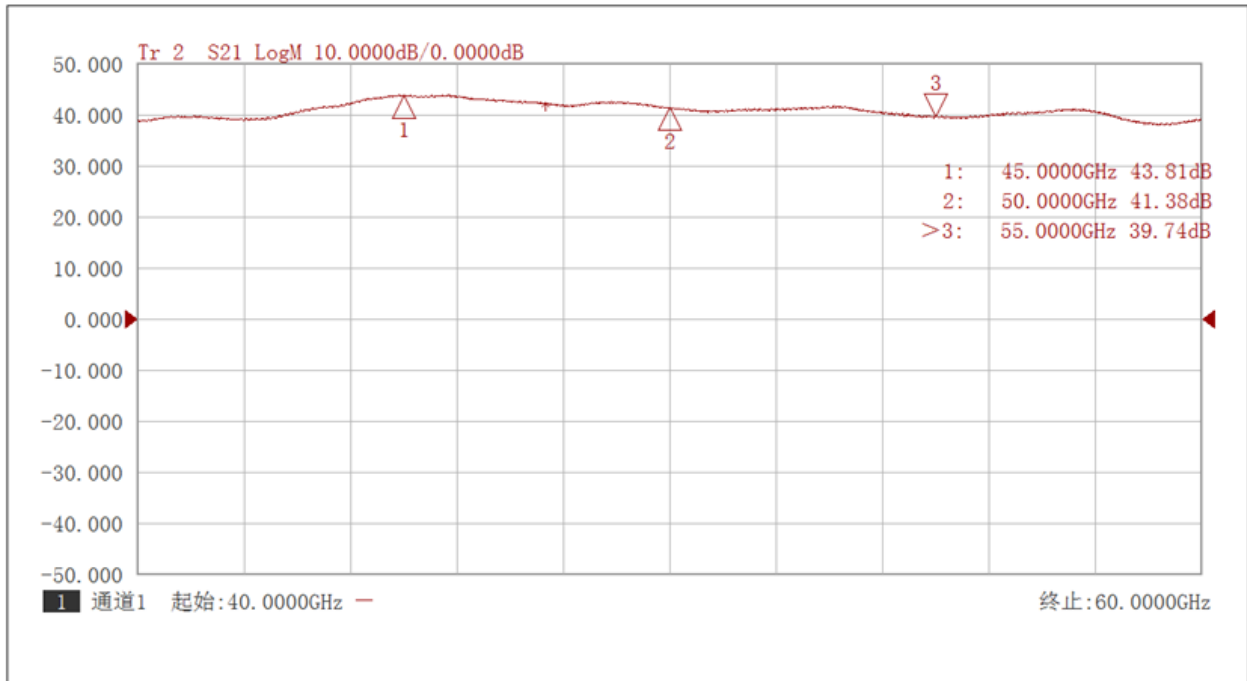
### Notes:

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.

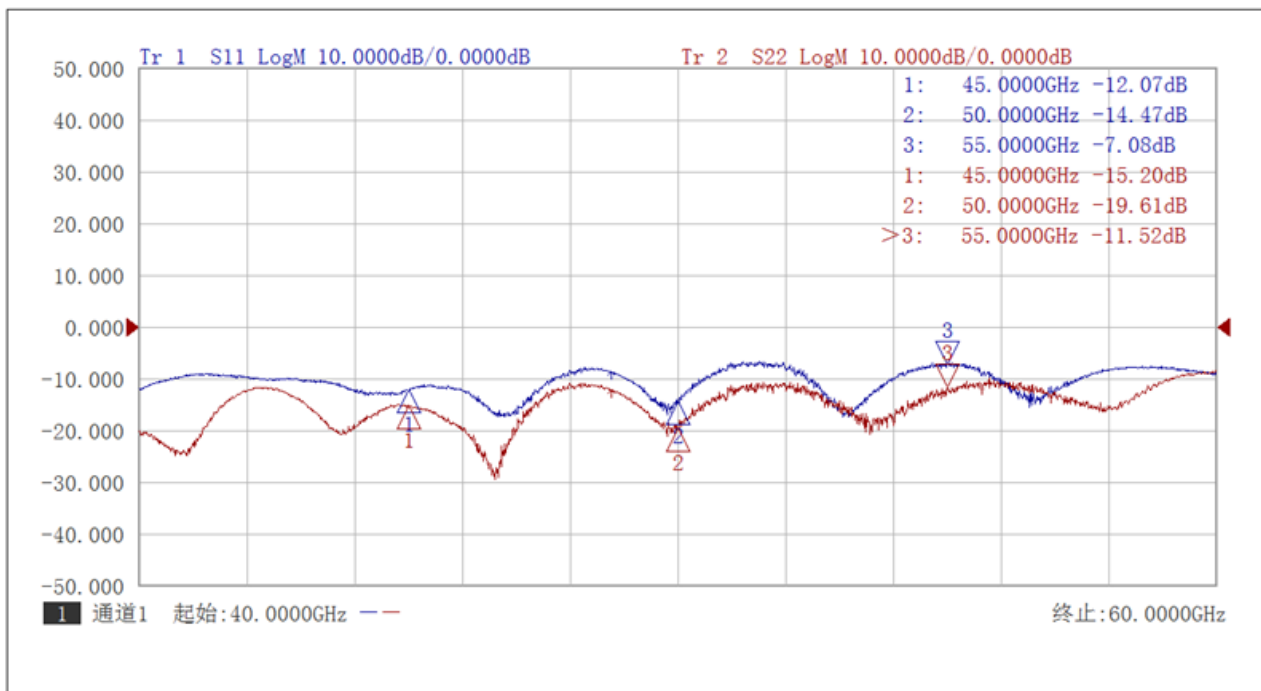


### Test Data

Vd=+5V, 25C

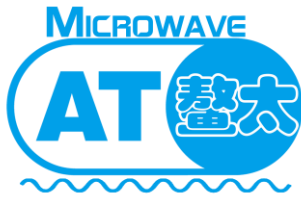


Gain Vs Frequency



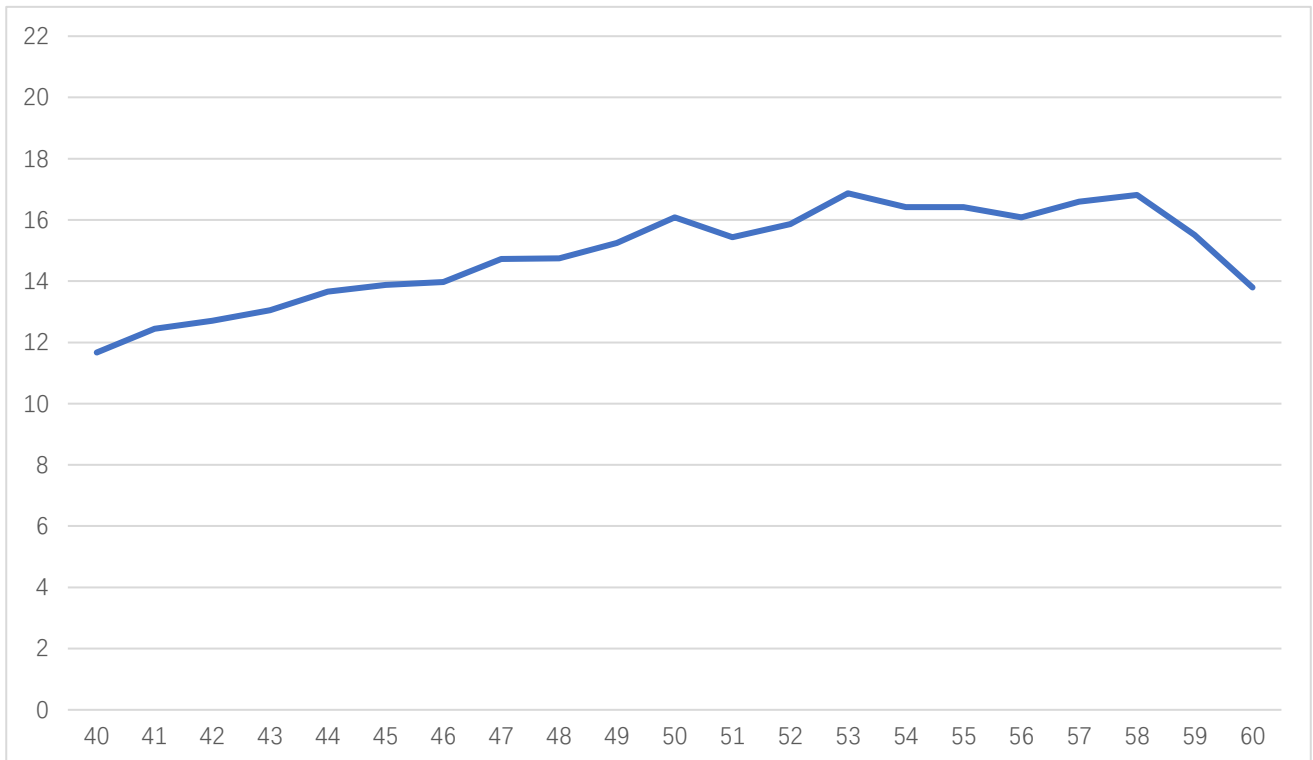
S11/S22 Vs Frequency



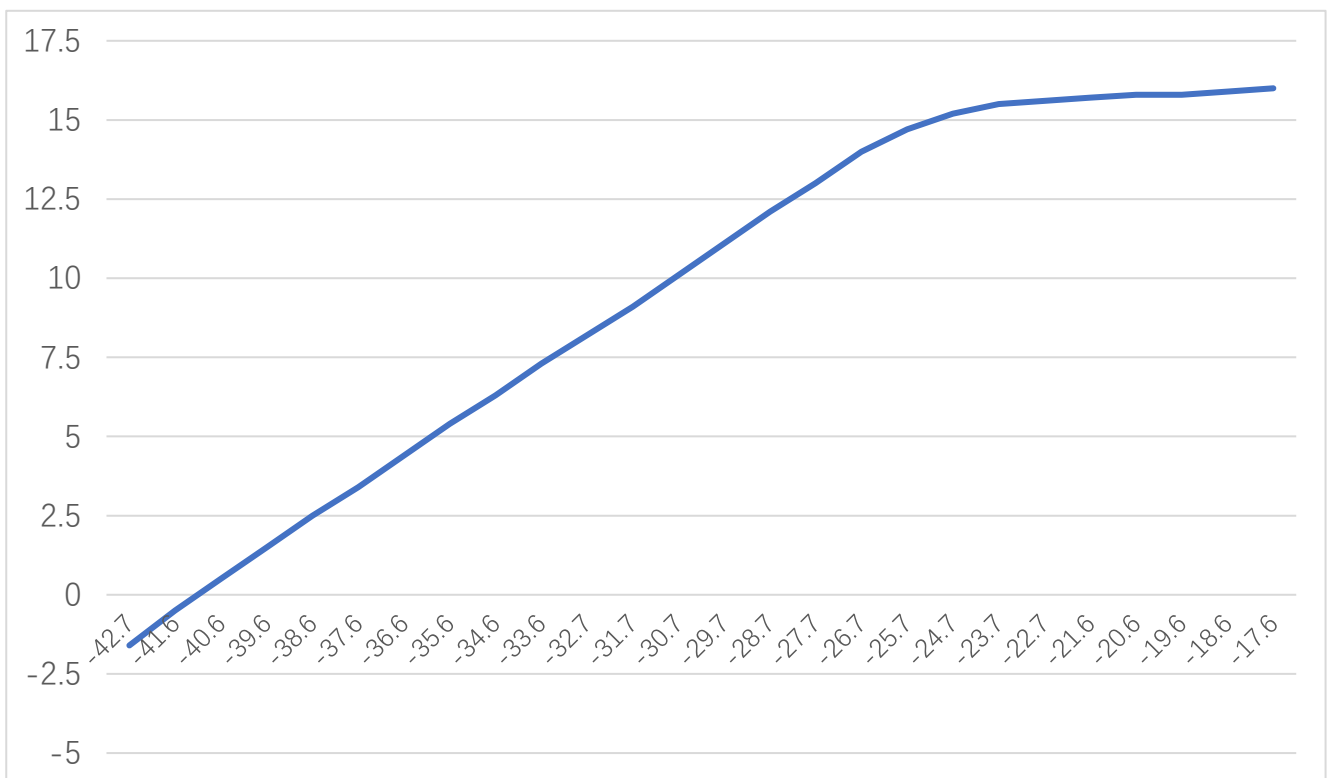


# AT-LNA-4060-3805C

U Band Low Noise Amplifier



Pout vs Frequency



Pout vs Pin at 50GHz

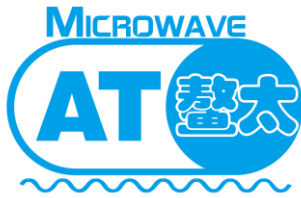
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# AT-LNA-4060-3805C

U Band Low Noise Amplifier



NF vs Frequency, 40-50GHz



**Dimension:** (unit in mm)

