

## 2-50GHz Low Noise Amplifier



### Product Overview

AT-LNA-0250-2505C is high gain low noise amplifier with 25dB gain in the frequency of 2-50GHz. The DC power requirement is +5V/160mA. The module is with 2.4mm connector.

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. If you don't find what you need, just send us email [sales@atmicrowave.com](mailto:sales@atmicrowave.com)

### Advantages

- ✓ Frequency: 2-50GHz
- ✓ Small signal gain: 25dB
- ✓ NF=5dB
- ✓ Single Power Supply

### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Key Features

Parameter	Min	Typical	Max
Frequency		2-50GHz	
Gain	23dB	25 dB	
Gain Flatness (2-45GHz)		+/-2dB	
NF		2-43GHz: 5dB 43-50GHz: 6.5dB	6dB 8dB
P1dB		2-40GHz: +10dBm	
Psat		2-40GHz: +15dBm 40-50GHz: +10dBm	
Drain Supply		+5V	+8V
Current		160 mA	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





# AT-LNA-0250-2505C

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## Mechanical Information

Item	Description
Input Port	2.4mm Female
Output Port	2.4mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
Size:	30x30x14 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+12 dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

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

### Caution:

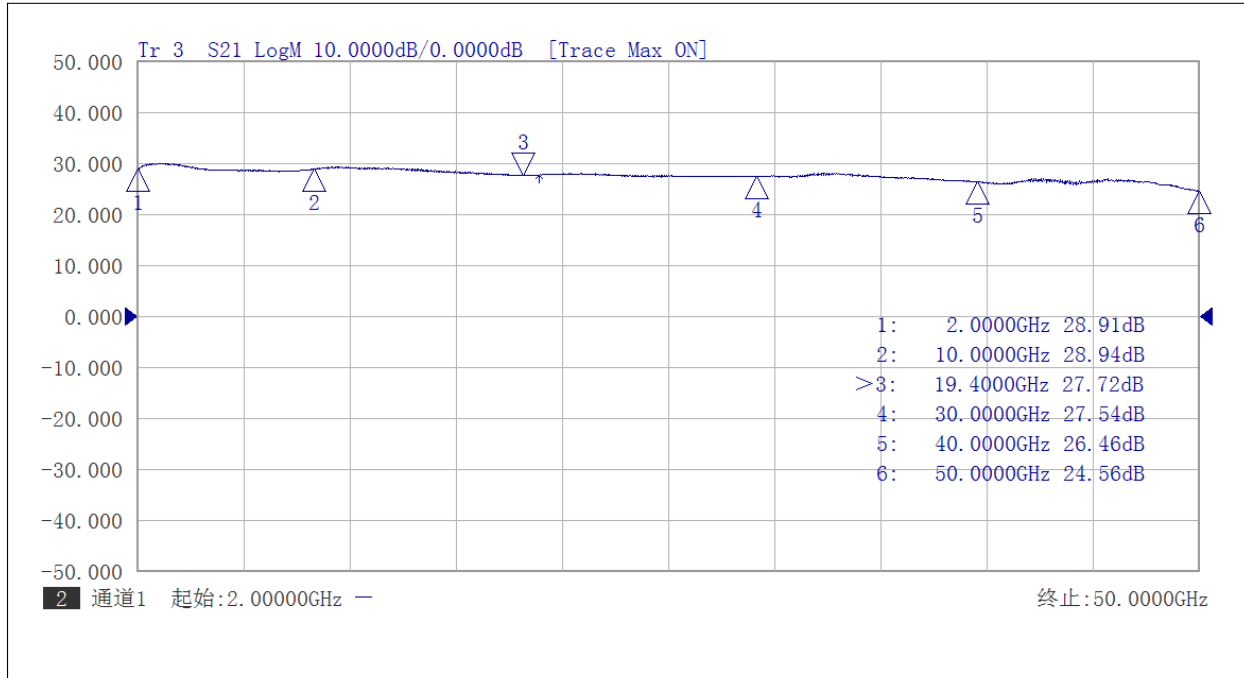
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

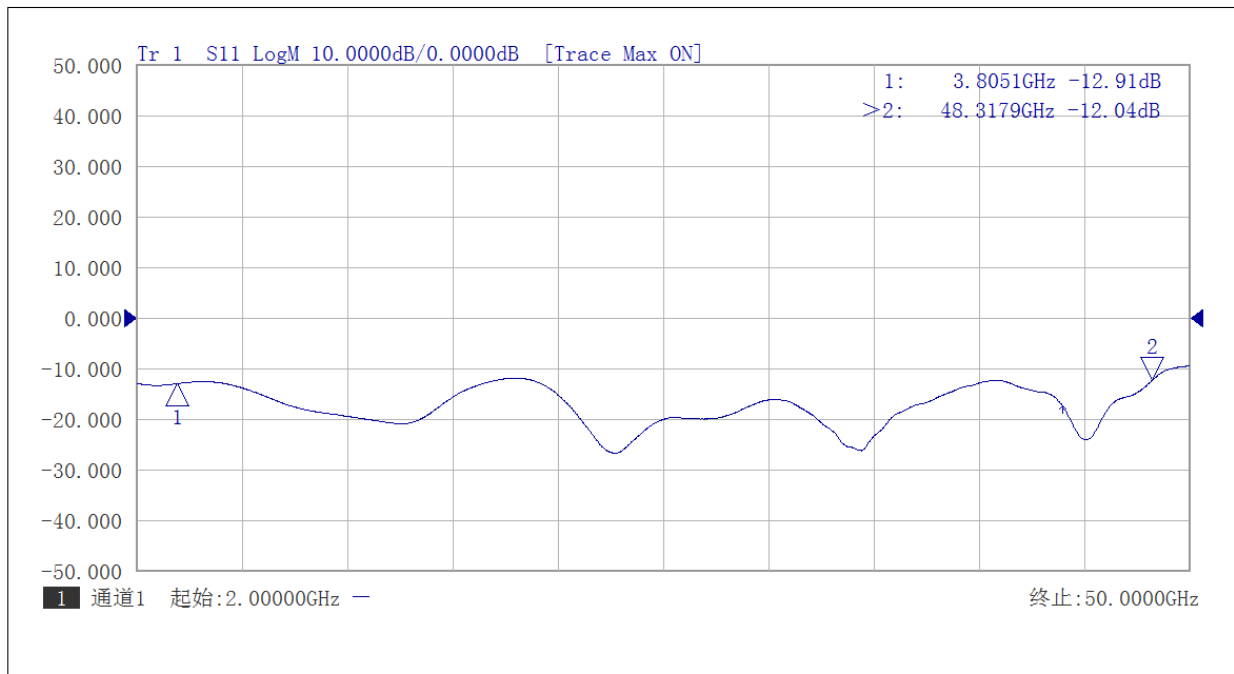
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



## Test Data:

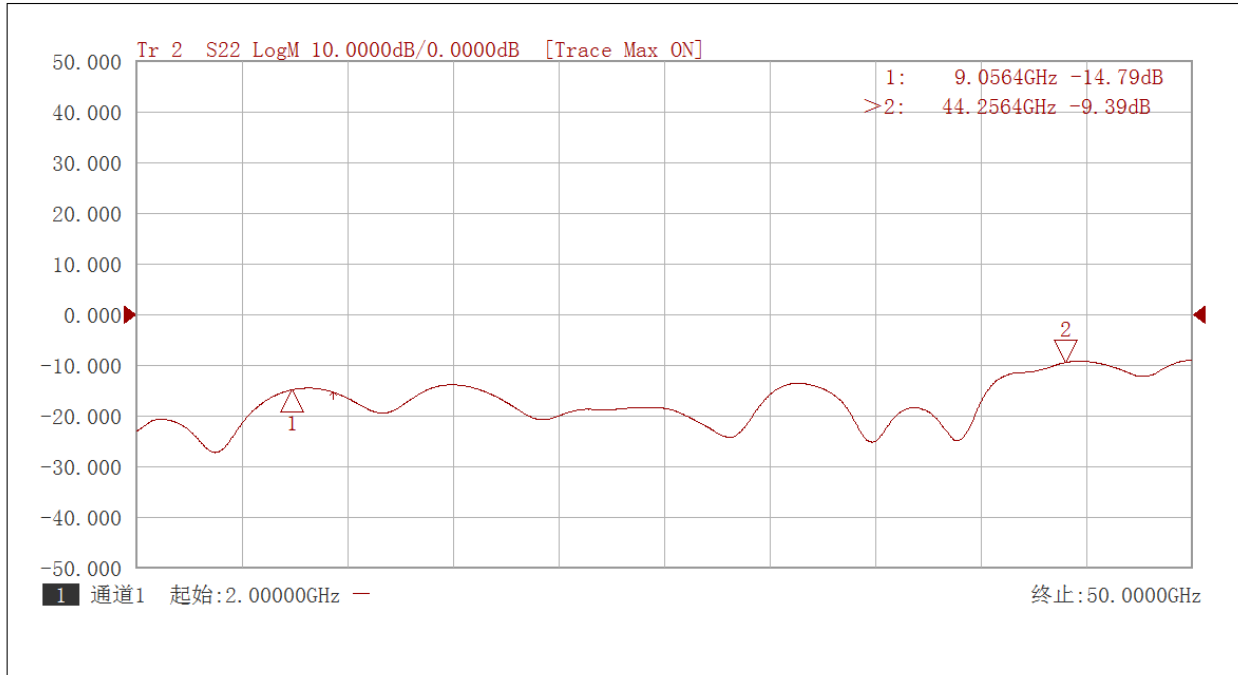


Gain vs Frequency

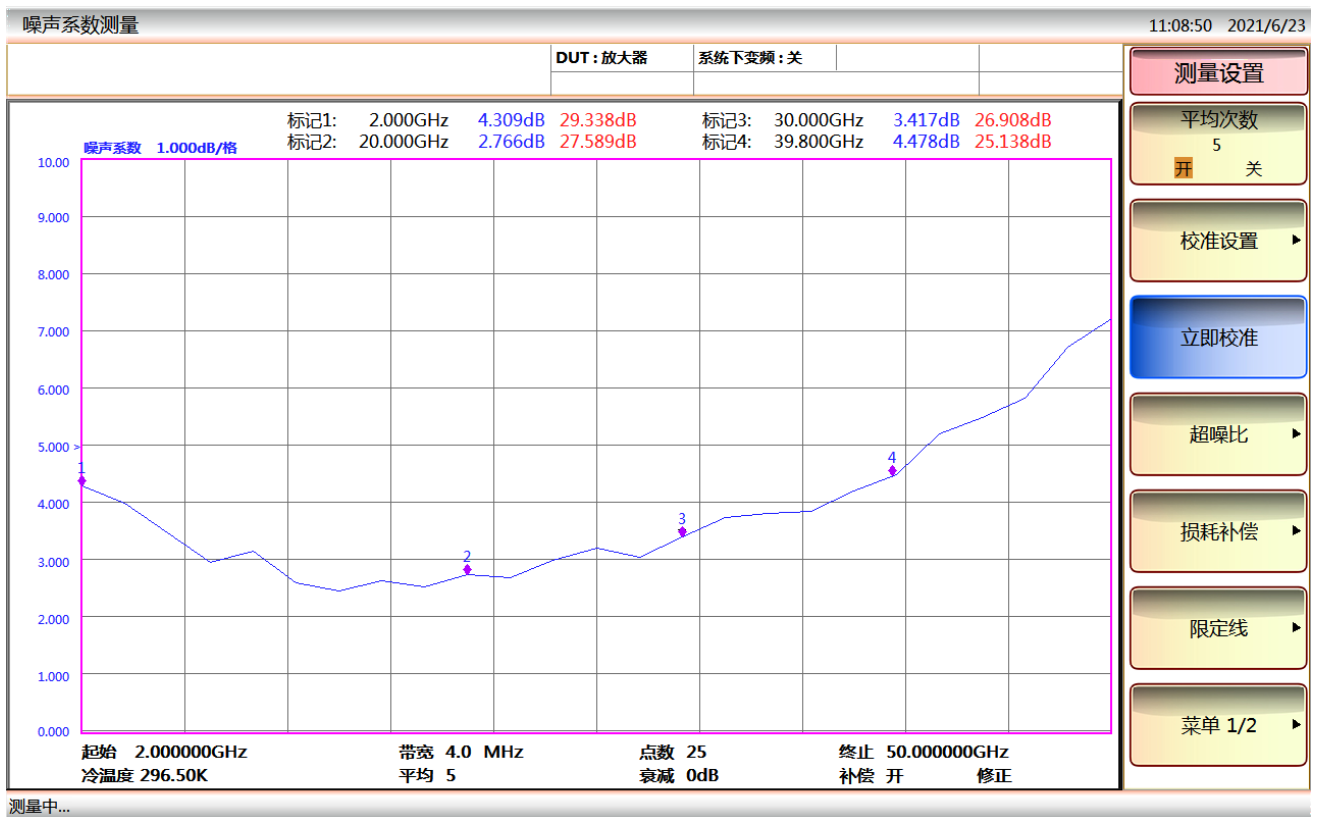


S11 Vs Frequency



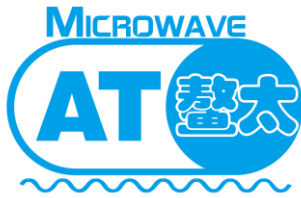


S22 vs Frequency



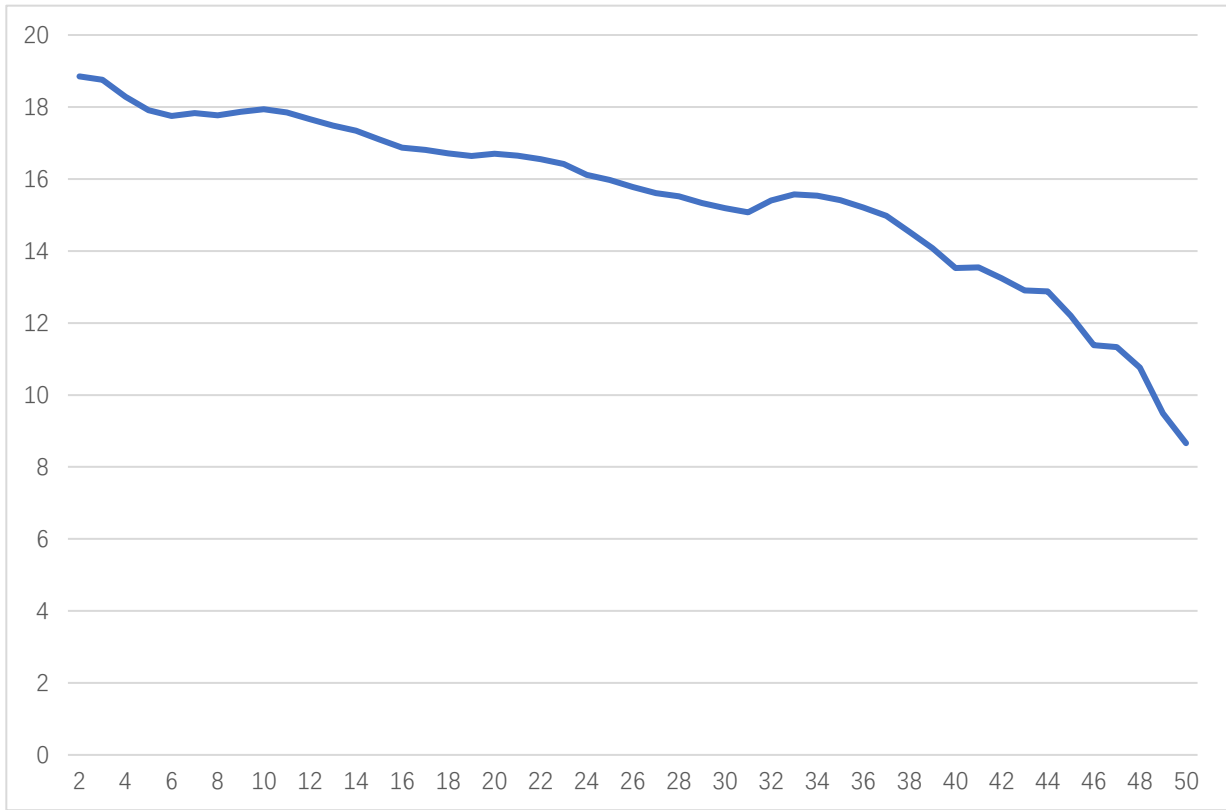
NF vs Frequency



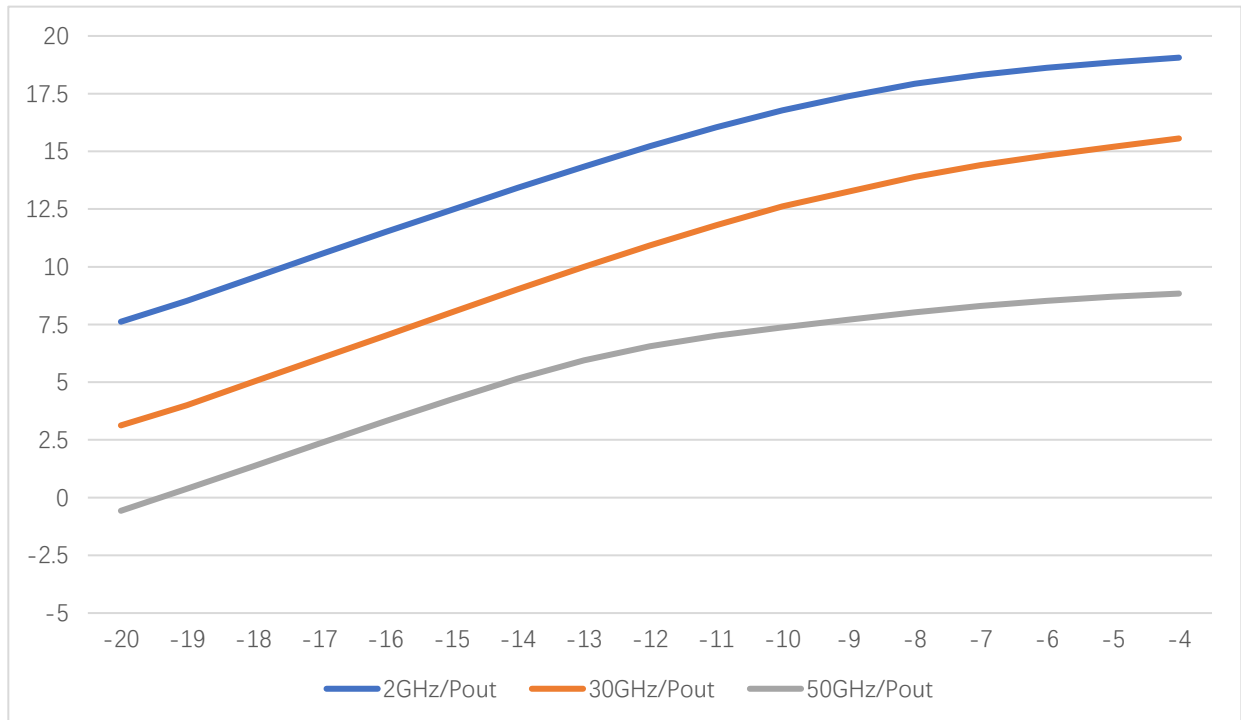


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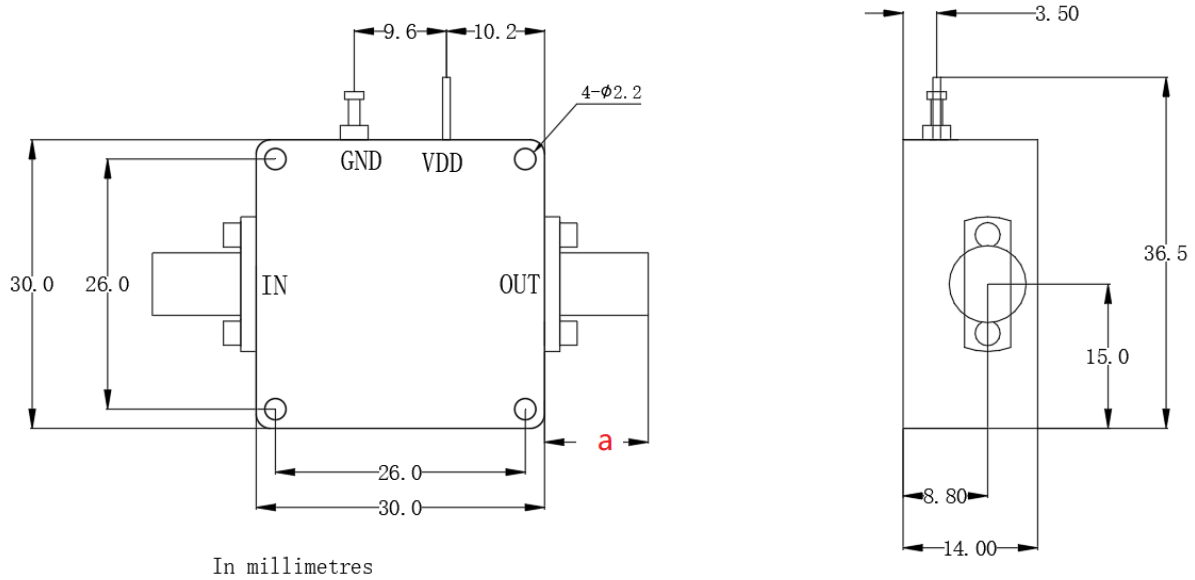
Psat vs Frequency



Pout vs Pin at 2/30/50GHz



**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.

Heat Sink Required If Case Temp Higher Than 50C

