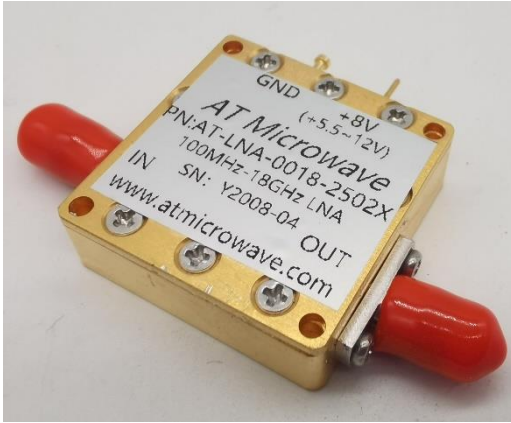




# AT-LNA-0018-2502X

100MHz-18GHz Low Noise Amplifier

## 100MHz-18GHz Low Noise Amplifier



### Product Overview

AT-LNA-0018-2502X is high gain low noise amplifier with 25dB gain in the frequency of 100MHz-18GHz. The DC power requirement is +5V/80mA. The module is with SMA 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 +25dBm, 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: 100MHz-18GHz
- ✓ Small signal gain: 25dB
- ✓ NF=2.5dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		100MHz-18GHz	
Gain		25 dB	
NF		2.5dB	4dB
P1dB		+13dBm	
Psat		+15dBm	
Drain Supply		+5V	+12V
Current		80 mA	
Input Return Loss		-12dB	
Output Return Loss		-12dB	
Spec Temp		25C	





# AT-LNA-0018-2502X

100MHz-18GHz Low Noise Amplifier

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	55g
Size:	30x30x9.5 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+20 dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

**Note: -40 to 85C operating Temp range is available according to request.**

### Caution:

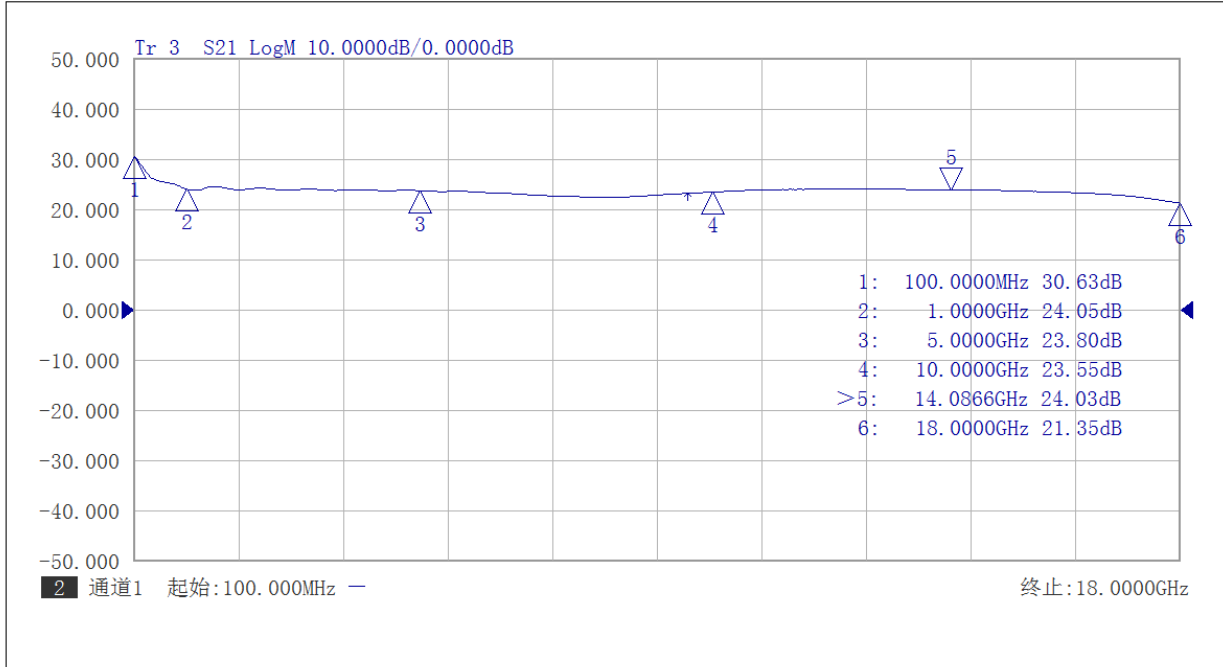
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

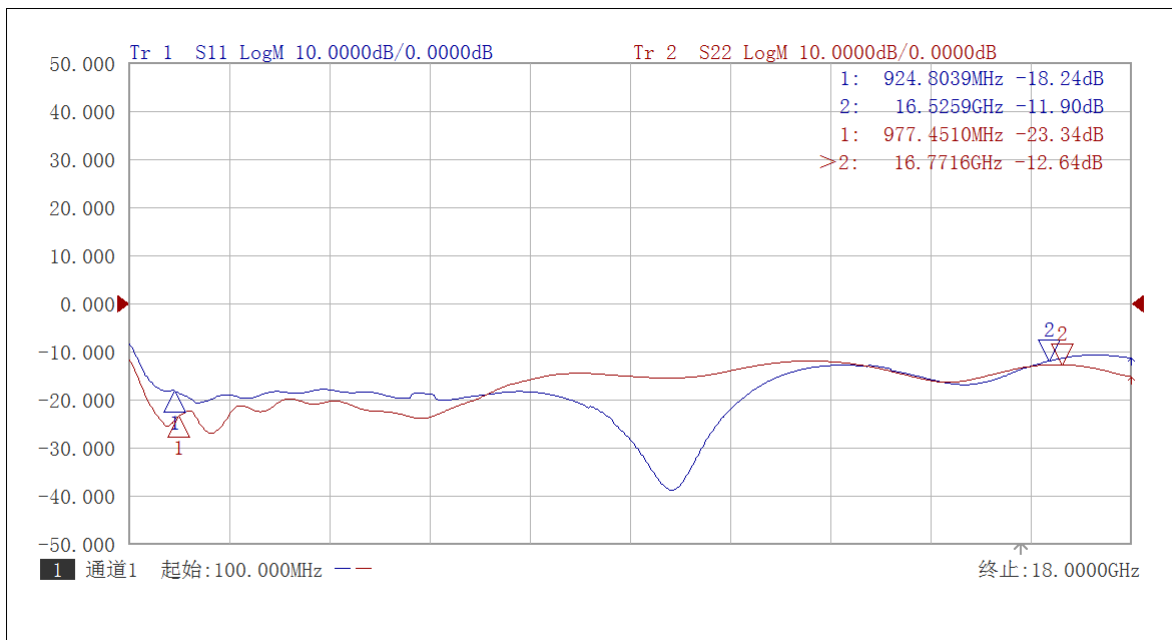
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data: (25C)

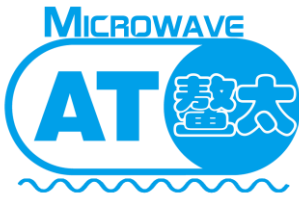


Gain S21 vs Frequency



Input and Output Return Loss vs Frequency





# AT-LNA-0018-2502X

100MHz-18GHz Low Noise Amplifier



NF vs Frequency 100MHz to 1GHz



NF test from 1-18GHz

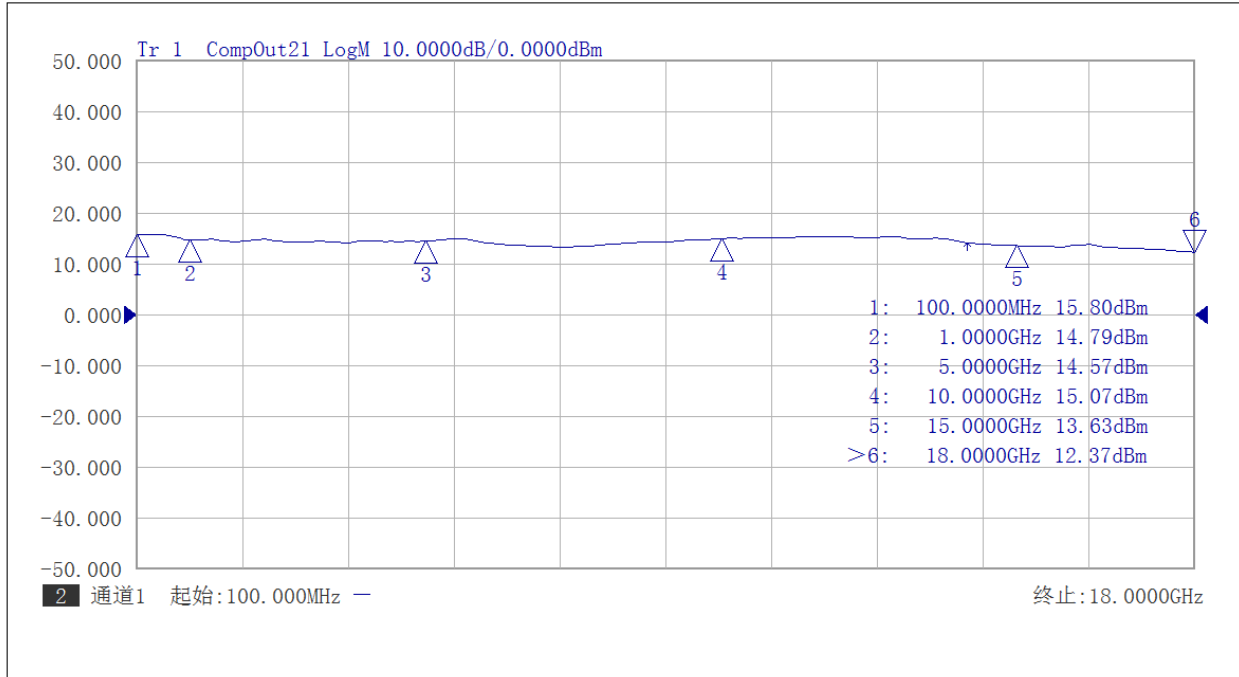
Shanghai AT Microwave Limited

Tel:021-6229 1233

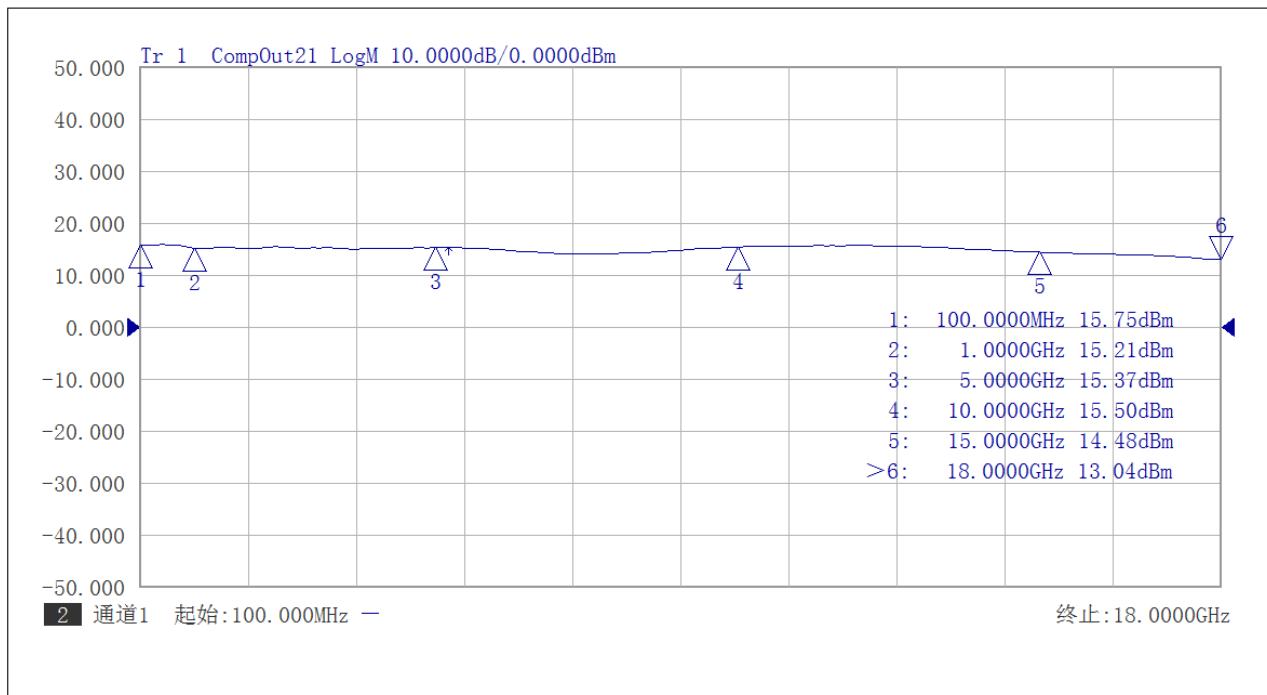
Email:sales@atmicrowave.com

www.atmicrowave.com





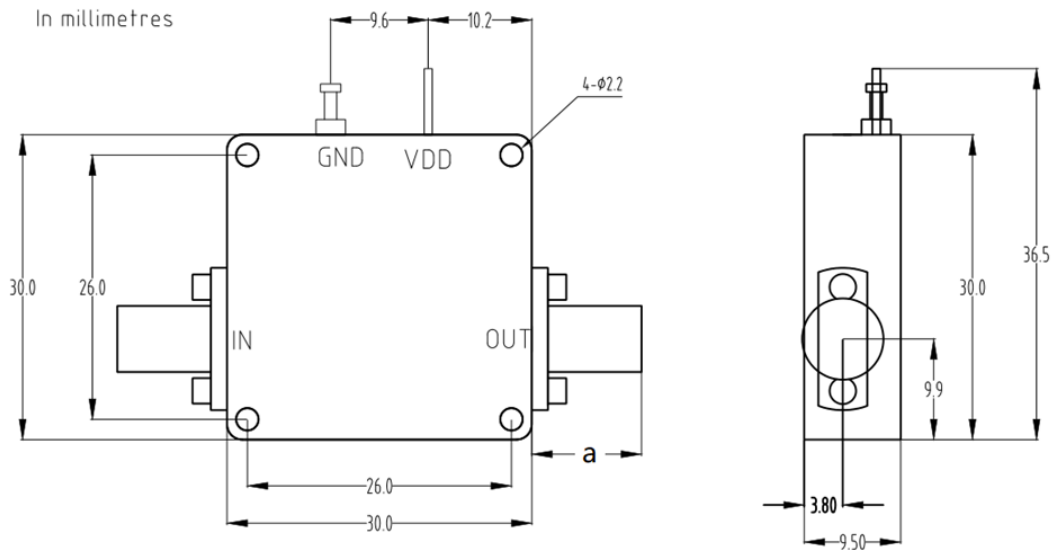
P1dB vs Frequency



P3dB vs Frequency



### 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.

Heatsink required is case temp over 50C

