

# AT-LNA-0018-4525P23

## 100MHz-18GHz Low Noise Amplifier

### 100MHz-18GHz Broadband LNA

### High Gain, High Power, Low NF

2023-5-5



#### Product Overview

AT-LNA-0018-4525P23 is broadband LNA from 100MHz-18GHz, with  $P_{out}=+23dBm$ . NF is 2.5dB from 0.1-18GHz. The DC power requirement is +12V/210mA. The module is with SMA Female

AT Microwave can provide all kinds of coaxial low noise amplifiers, with frequency from 0.01-67GHz, gain from 20 to 60dB,  $P_{out}$  from +5 to +27dBm, and connectors from SMA to 1.85mm.

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

#### Advantages

- ✓ Frequency: 100MHz-18GHz
- ✓ NF=2.5dB
- ✓ High gain: 45dB
- ✓ Single Power Supply

#### Application

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

#### Key Features

Parameter	Min	Typical	Max
Frequency		100MHz-18GHz	
Gain	45dB	47dB	
Gain flatness		+/-1.5dB	+/-2.5dB
P1dB	+20dBm	+21dBm	
Psat	+22dBm	+23dBm	
NF		2.5dB	3.5dB
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Drain Supply	+8V	+12V	+13V
Current		210 mA	280mA
Spec Temp		25C	





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100MHz-18GHz Low Noise Amplifier

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight	80g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+15 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

## 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.

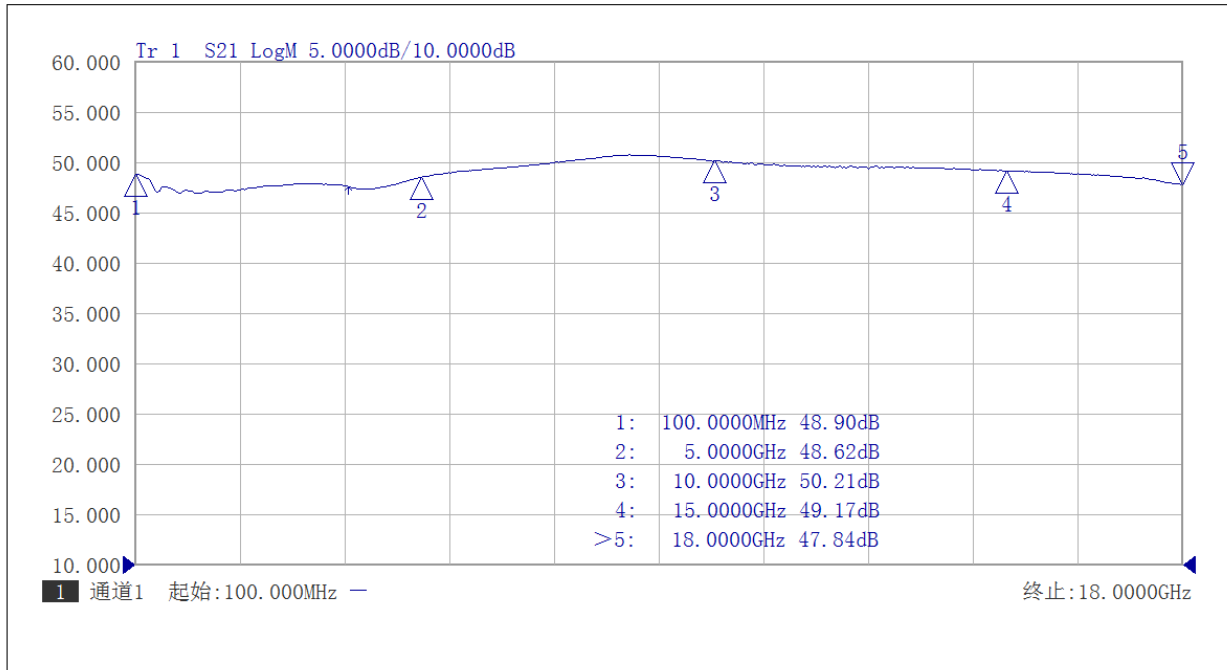
## Part Number Selection Guide

Item	Description
AT-LNA-0018-4525P23	Stand Module with DC Power Supply
AT-LNA-0018-4525P23- <b>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

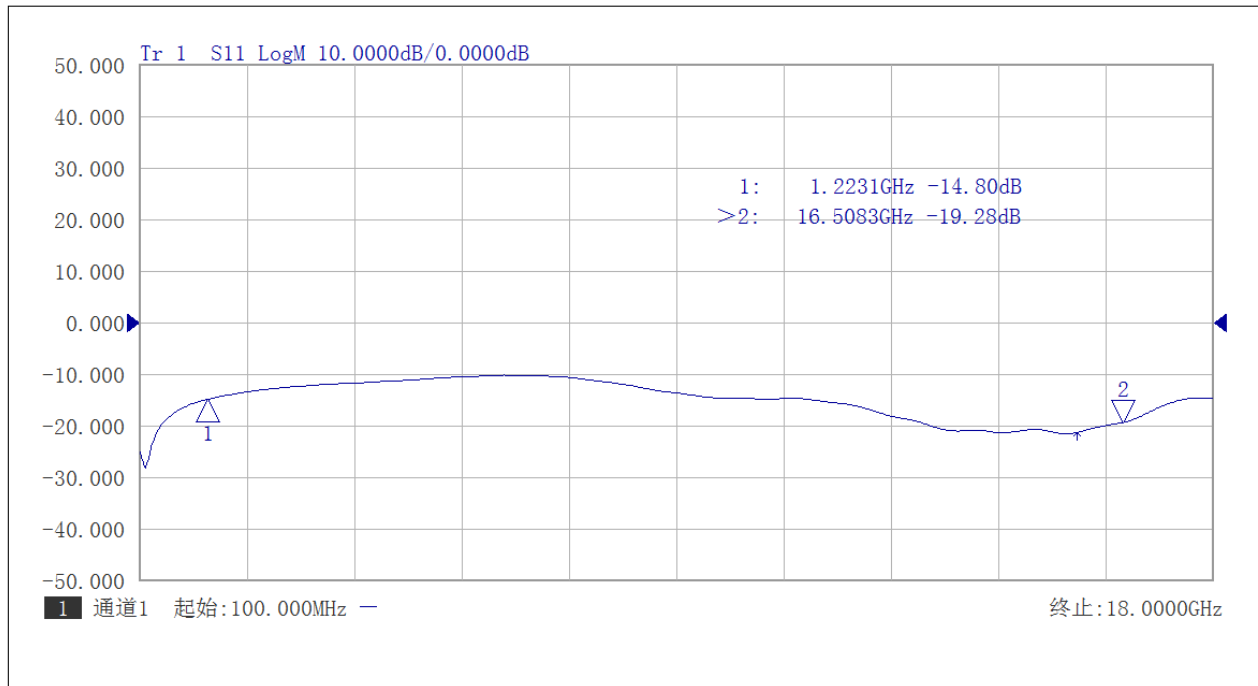


## Test Data (25C)

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

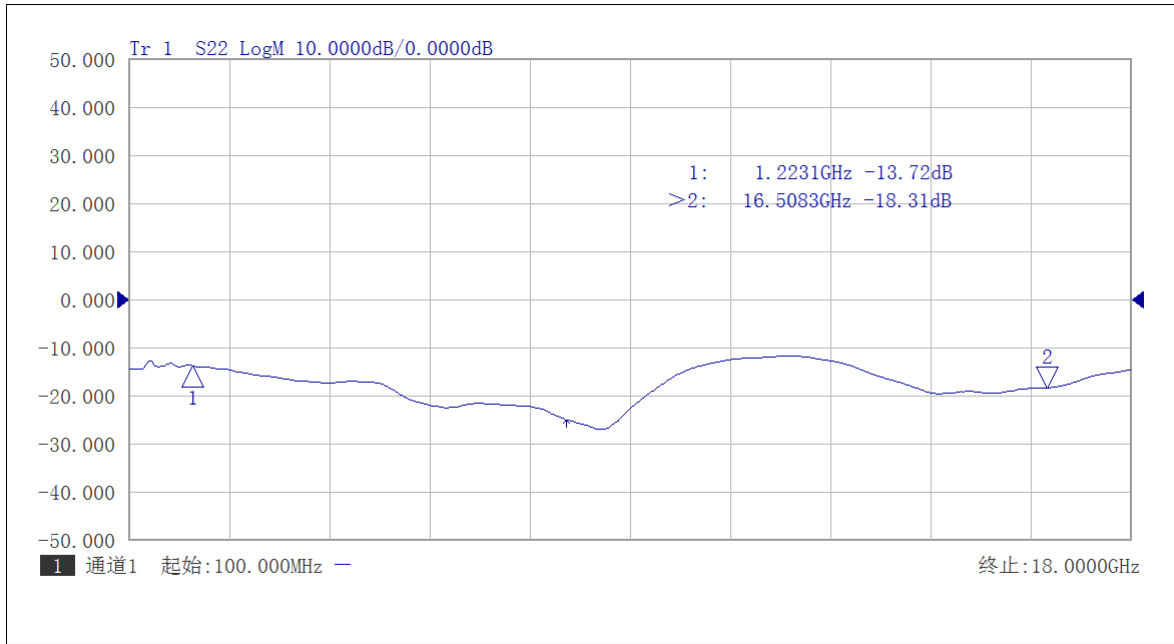


Gain vs Frequency

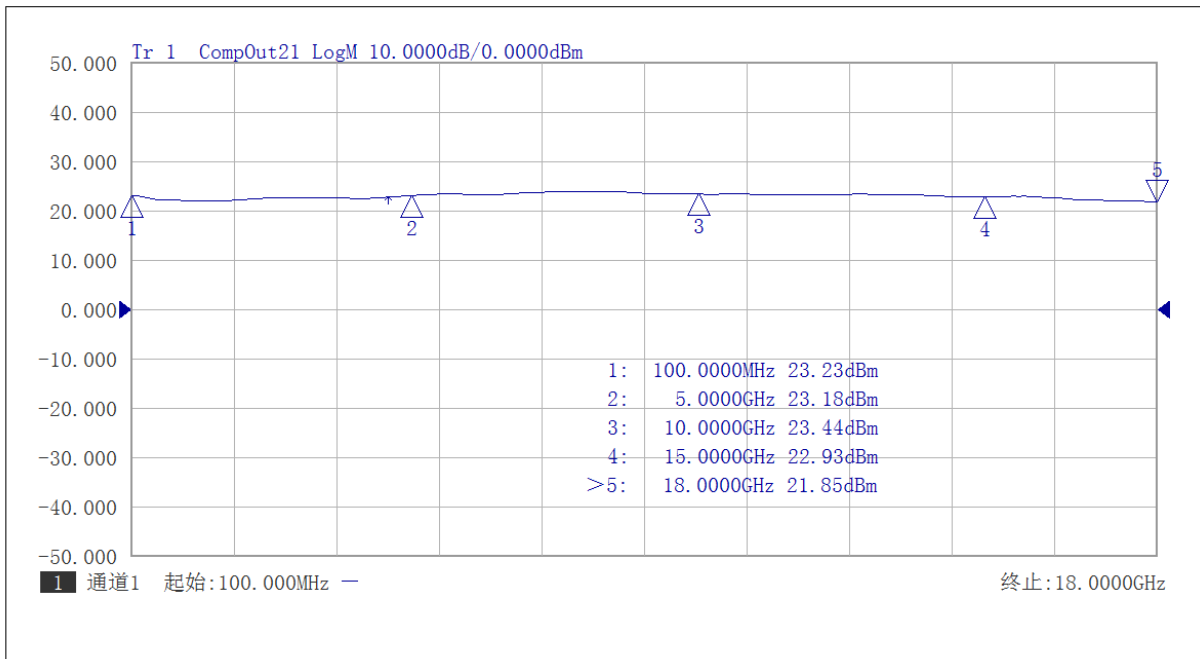


Input Return Loss vs Frequency



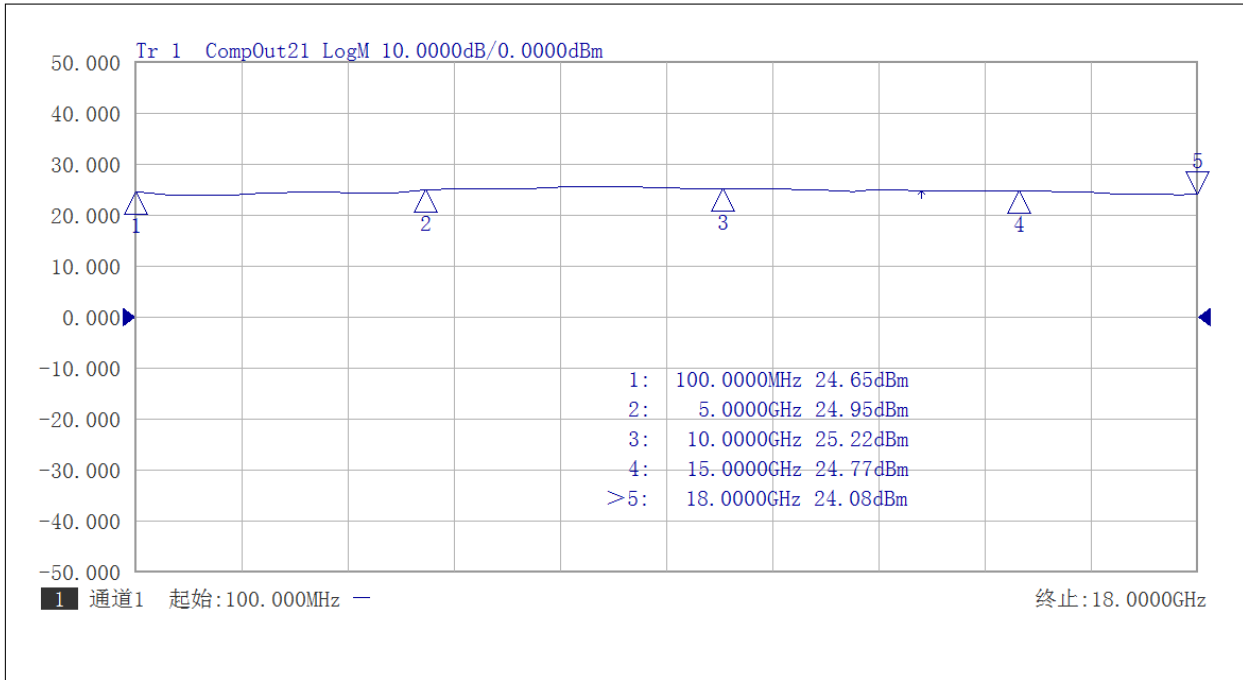


Output Return Loss vs Frequency



P1db vs Frequency





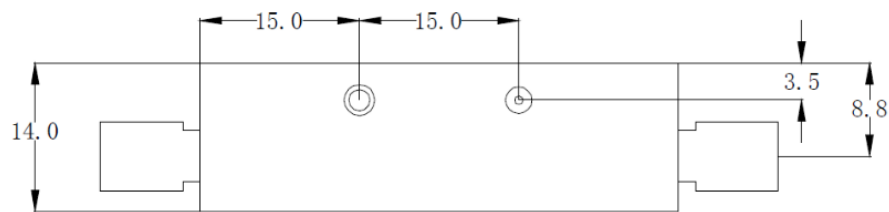
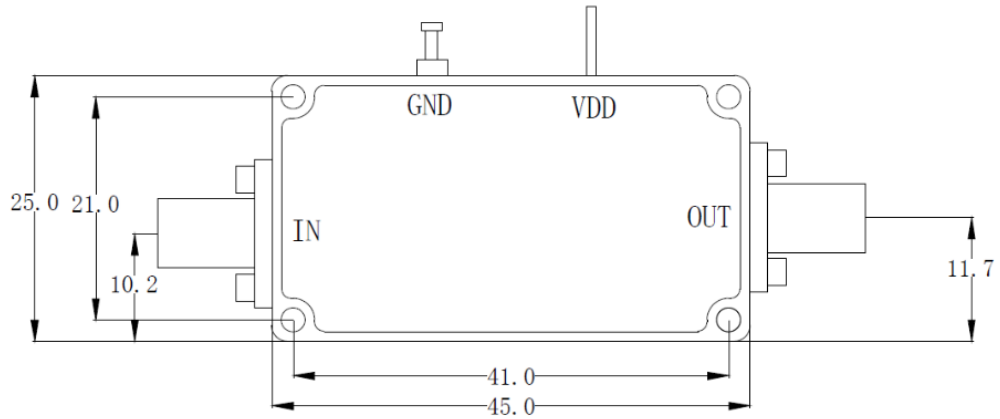
P3db vs Frequency



NF 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.

Standard module outline, Heat sink required if case temp exceeds 50C



**-LCBT Option Dimension:** (unit in mm)

