

## 22-44GHz High Power LNA



### Product Overview

AT-LNA-2244-4025P20 is high gain low noise amplifier with 40dB gain in the frequency of 22-44GHz. The DC power requirement is +12V/250mA. The module is with 2.4mm Female 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 +33dBm, 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: 22-44GHz
- ✓ Small signal gain: 40dB
- ✓ NF=2.5dB
- ✓ High Pout=+20dBm

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		22-44GHz	
Gain	37dB	40 dB	
Gain Flatness		+/-2dB	
NF		2.5dB	3.5
P1dB		+18dBm	
Psat		+20dBm	
Drain Supply	+8V	+12V	+13V
Current		250 mA	
Input Return Loss	-5	-10dB	
Output Return Loss	-5	-10dB	
Spec Temp		25C	





# AT-LNA-2244-4025P20

22-44GHz Low Noise Amplifier

## 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:	45x34x9.5 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+10 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

## Notes:

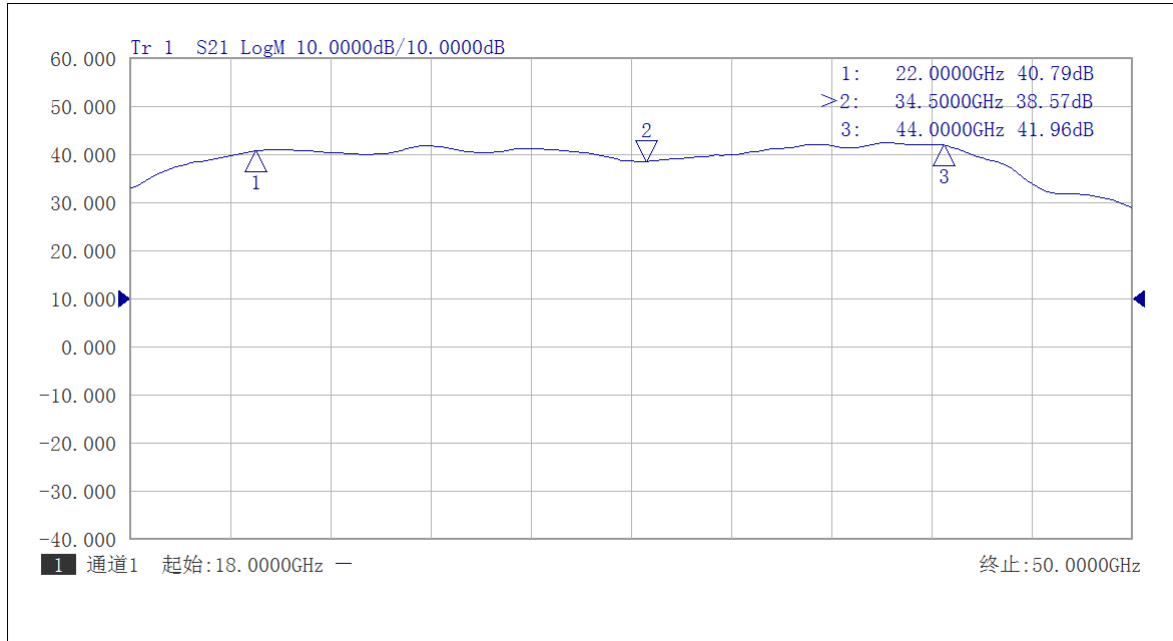
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

## Part Number Selection Guide

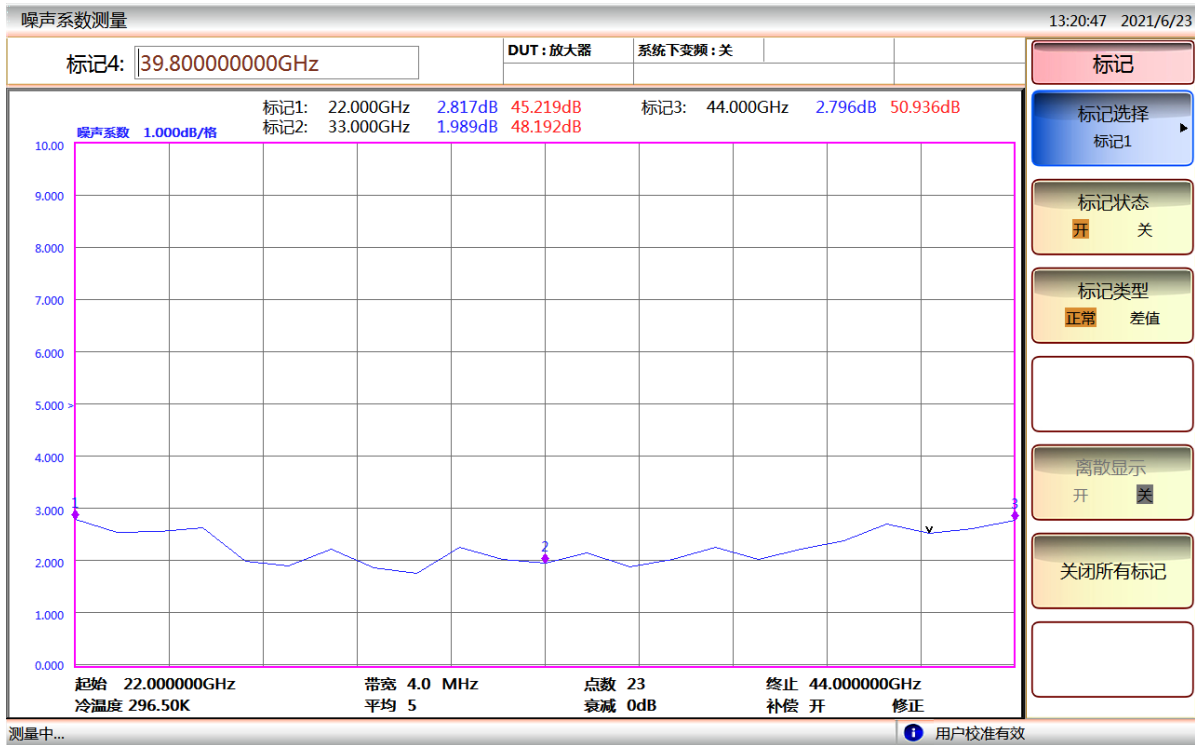
Item	Description
PN	Stand Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter



### Test Data(25C)



Gain vs Frequency



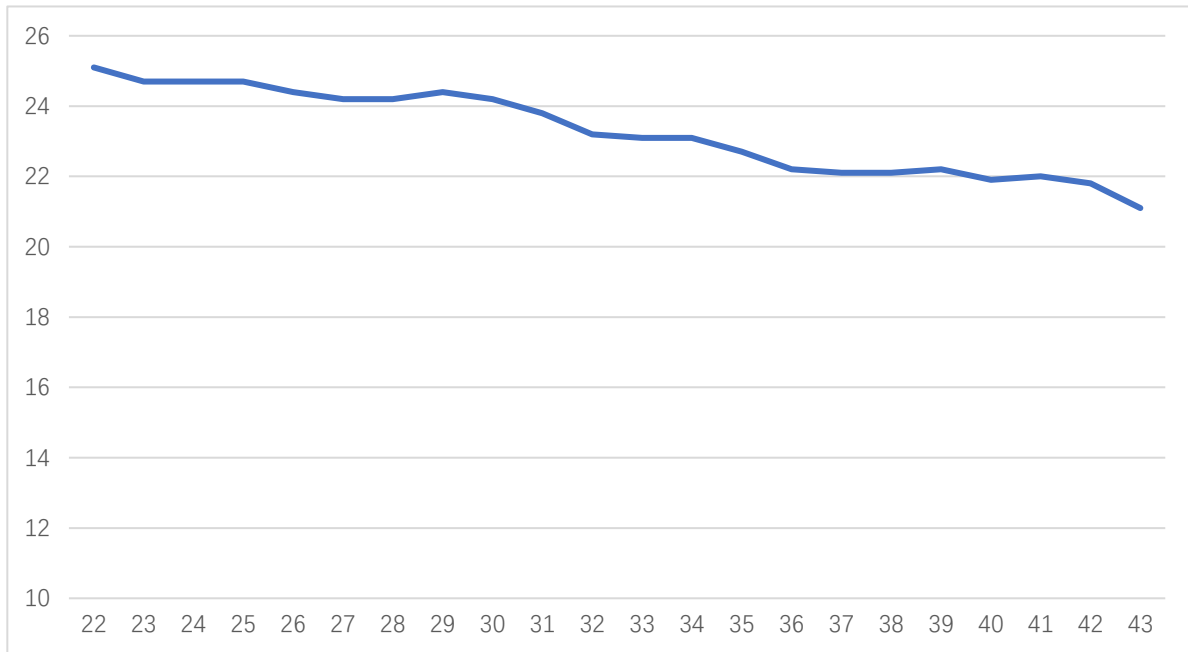
NF vs Frequency





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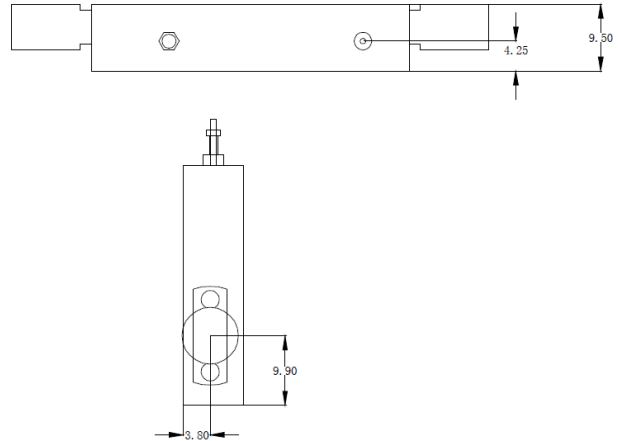
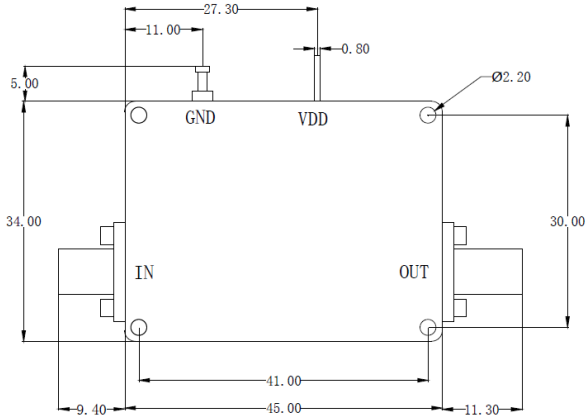
22-44GHz Low Noise Amplifier



PSAT VS Frequency

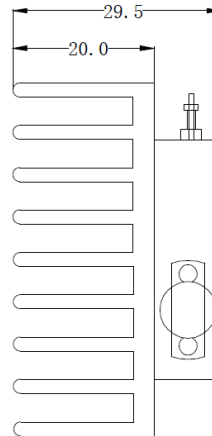
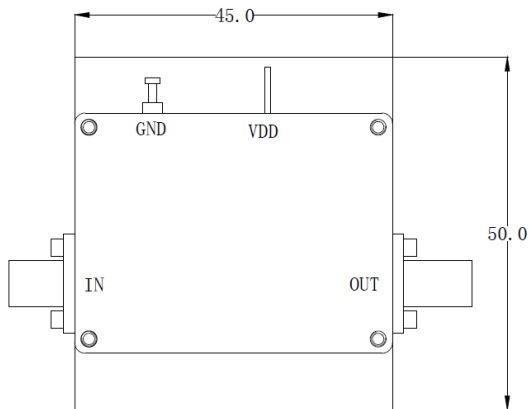


## Dimension: (unit in mm)



	<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.



Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

Heat Sink Required During Operation

