

## 2-43.5GHz Low Noise Amplifier



### Product Overview

AT-LNA-0243-4204P22 is high gain low noise amplifier with 42dB gain in the frequency of 2-43.5GHz. The DC power requirement is +12V/330mA. The module is with 2.92mm 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.

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

### Advantages

- ✓ Frequency: 2-43.5GHz
- ✓ Small signal gain: 42dB
- ✓ NF=4.5dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		2-43.5GHz	
Gain	39	42 dB	
Gain Flatness		+/-1.5dB	+/-3dB
NF (2-40GHz)		4.5dB	6dB
P1dB (2-40GHz)		+20dBm	
Psat (2-40GHz)		+22dBm	
Drain Supply	+8V	+12V	+13V
Current		330 mA	420mA
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





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## Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm 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	+12dBm
Operating Temperature(note)	-20 to + 70C
Storage Temperature	-65 to +150C

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

## 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.

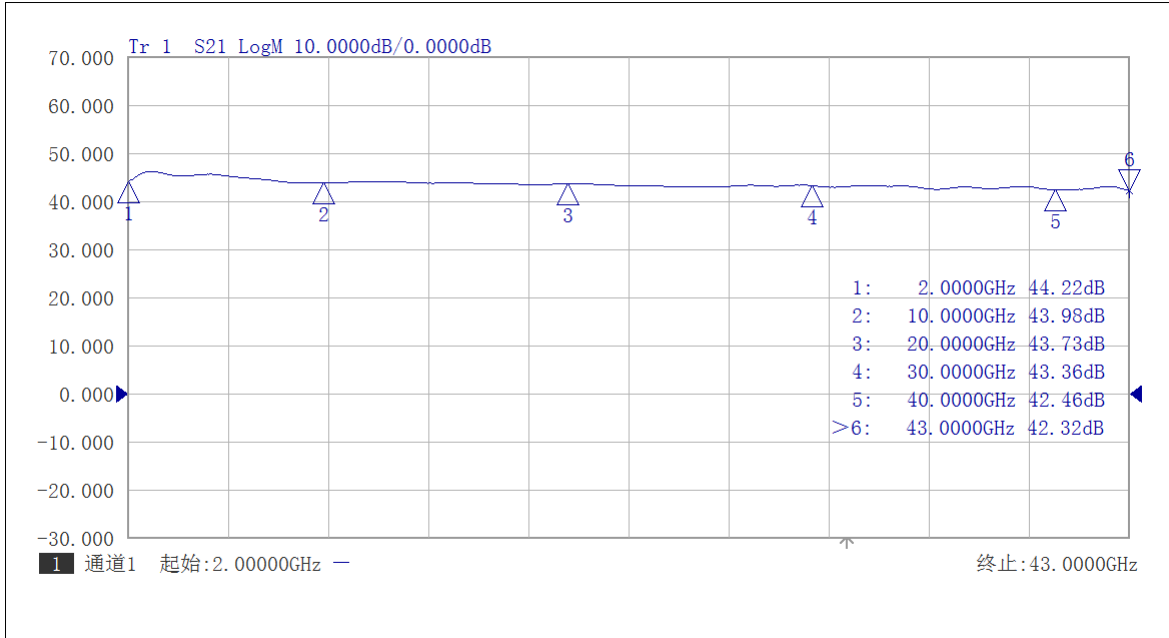
## Part Number Selection Guide

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

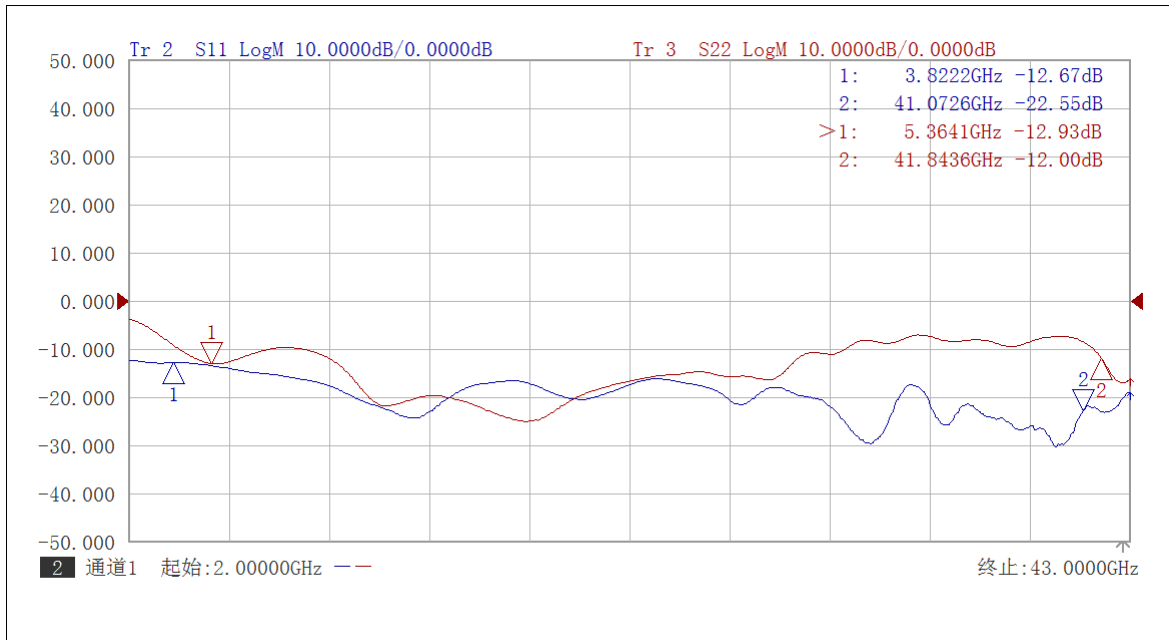


### Test Data (25C)

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

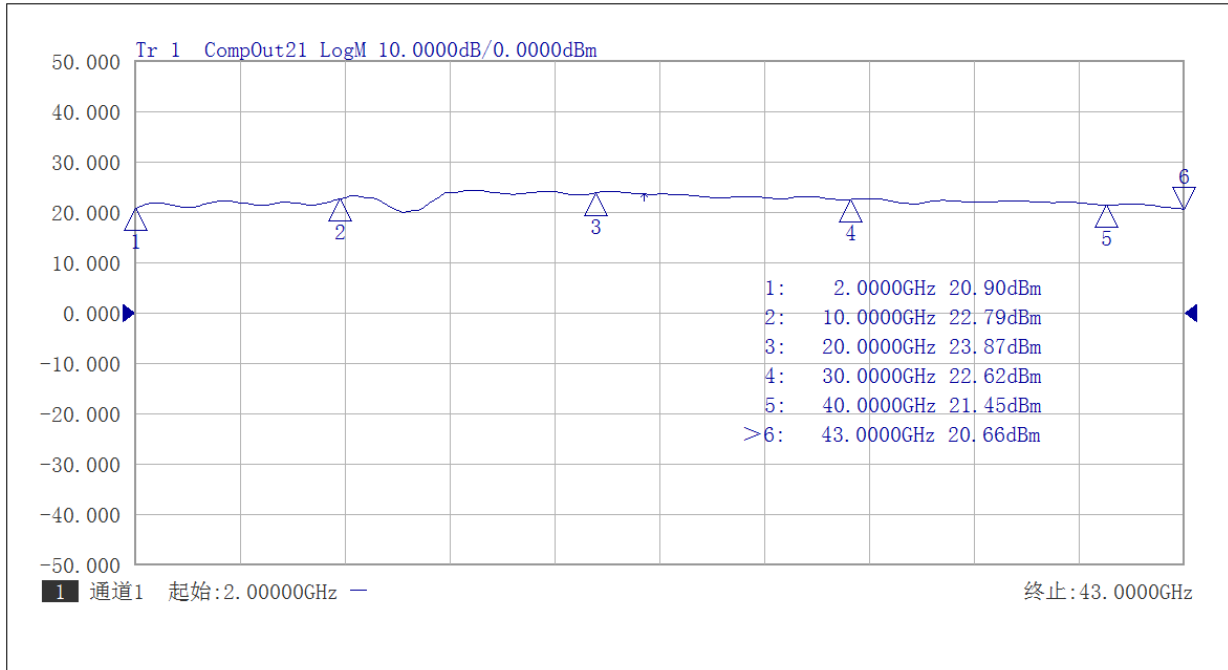


S21 Gain VS Frequency

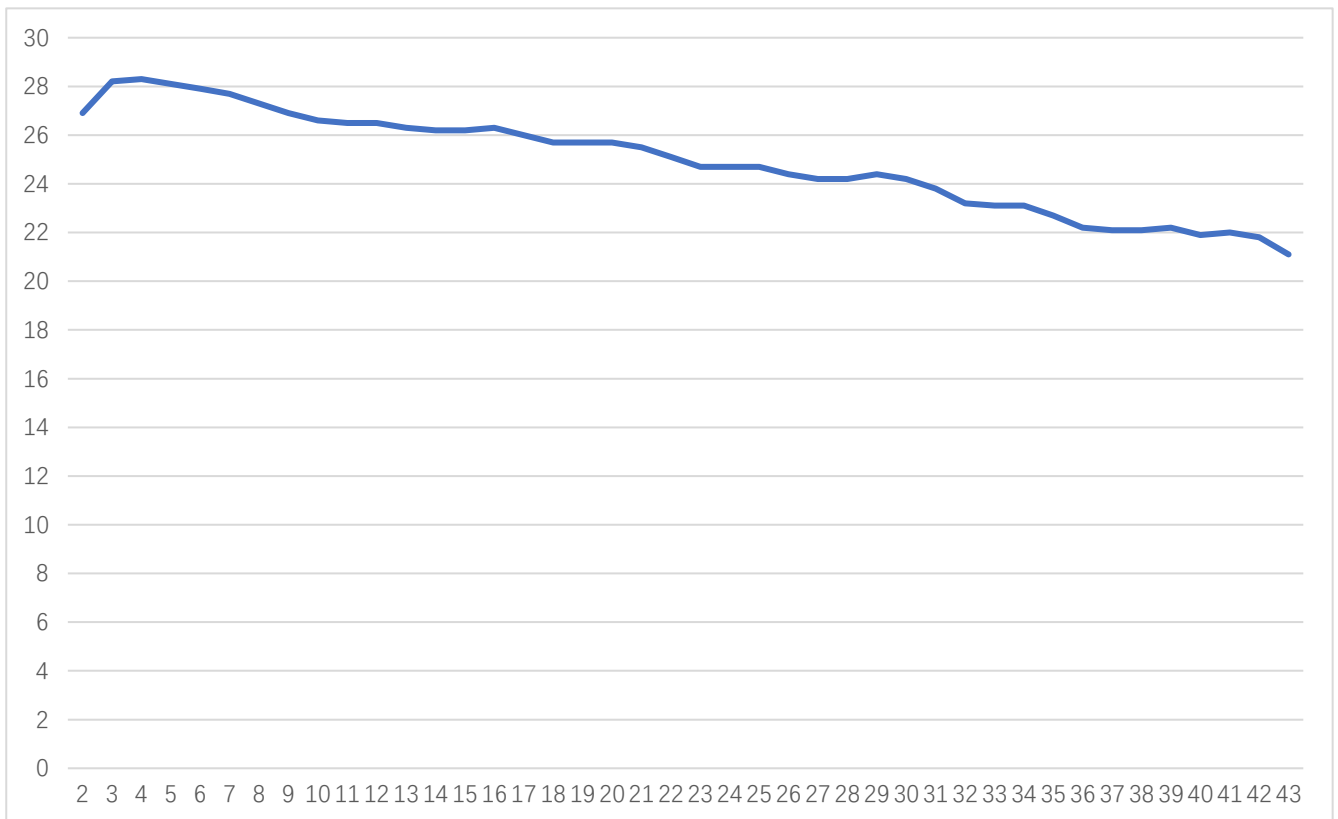


S11/S22 Return Loss VS Frequency





P1 vs Frequency



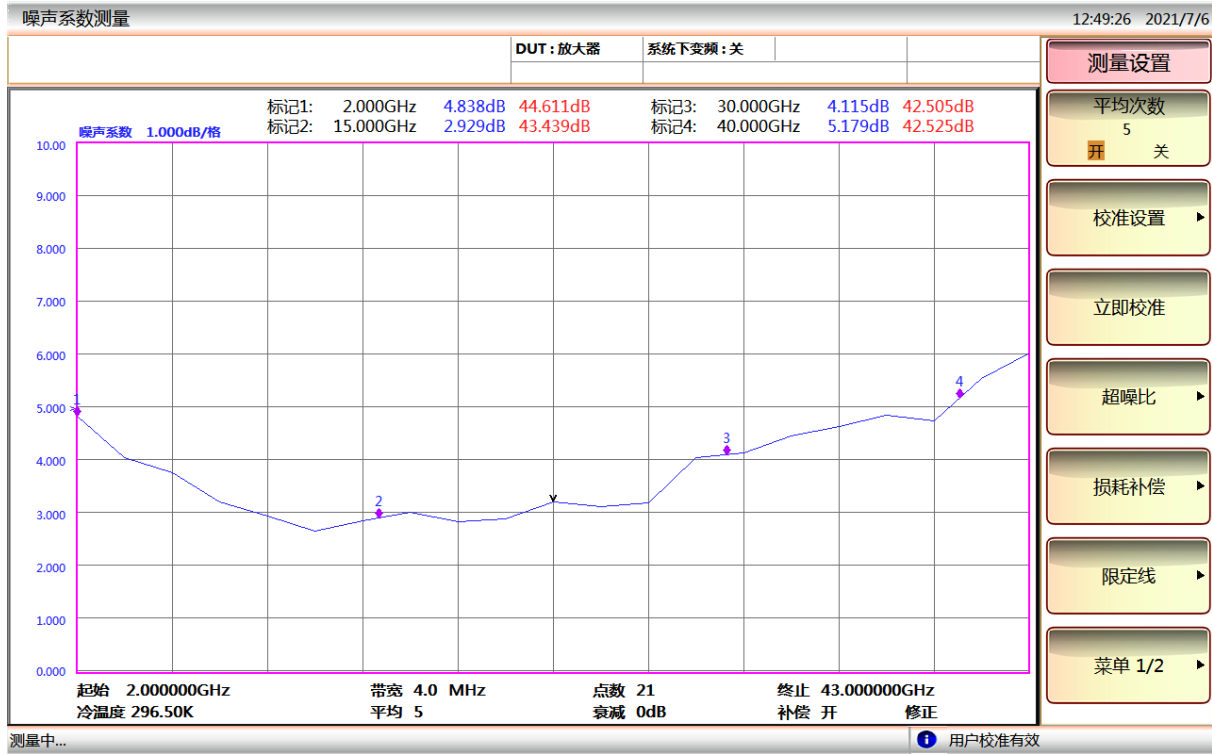
Psat vs Frequency





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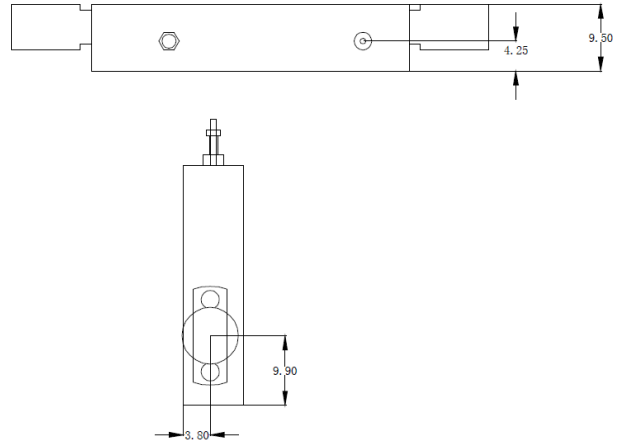
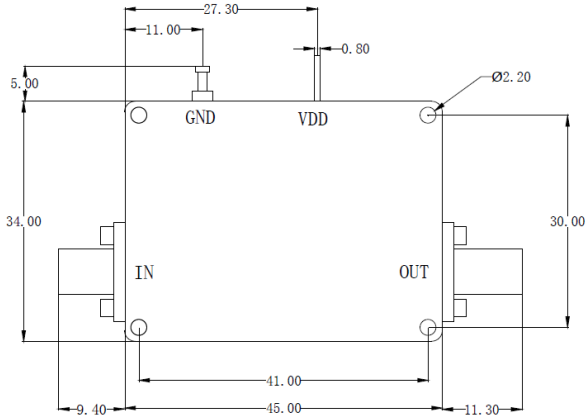
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NF vs Frequency

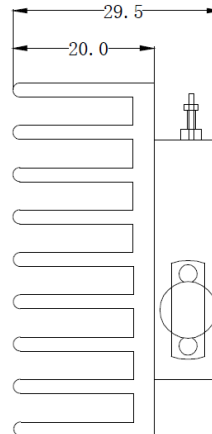
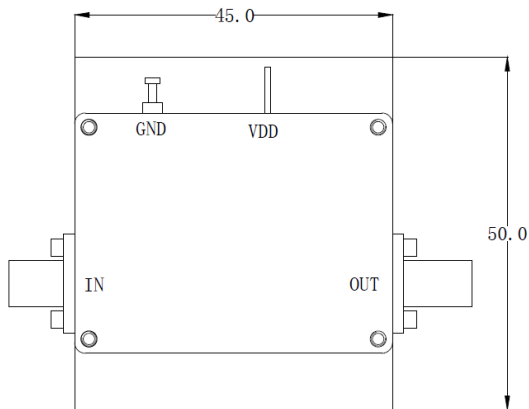


## Dimension: (unit in mm)



	<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.



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 If Case Temp Higher Than 50C

