

## 18-40GHz Super-High Gain 60dB , High Power



### Product Overview

AT-LNA-1840-6004P20 is high gain, high power low noise amplifier with 60dB gain in the frequency of 18-40GHz. The DC power requirement is +8V/450mA. The module is with 2.92mm connector.

AT-LNA-1840-5304L is high gain LNA with Pout=+13dBm, AT-LNA-1840-6004P20 is same NF with high power +20dBm.

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

### Advantages

- ✓ Frequency: 18-40GHz
- ✓ Small signal gain: 60dB
- ✓ NF=4dB
- ✓ Pout=+20dBm
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		18-40GHz	
Gain	57dB	60dB	
Gain Flatness		+/-3dB	
NF		4dB	5dB
P1dB		+18dBm	
Psat		+20dBm	
Drain Supply	+5V	+8V	+12V
Idd		0.45A	0.6A
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





# AT-LNA-1840-6004P20

18-40GHz Super High Gain, LNA

## 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:	55x34x9.5 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+10 dBm
Operating Temperature(Note)	-20 to + 70C
Storage Temperature	-65 to +160C

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

## Notes:

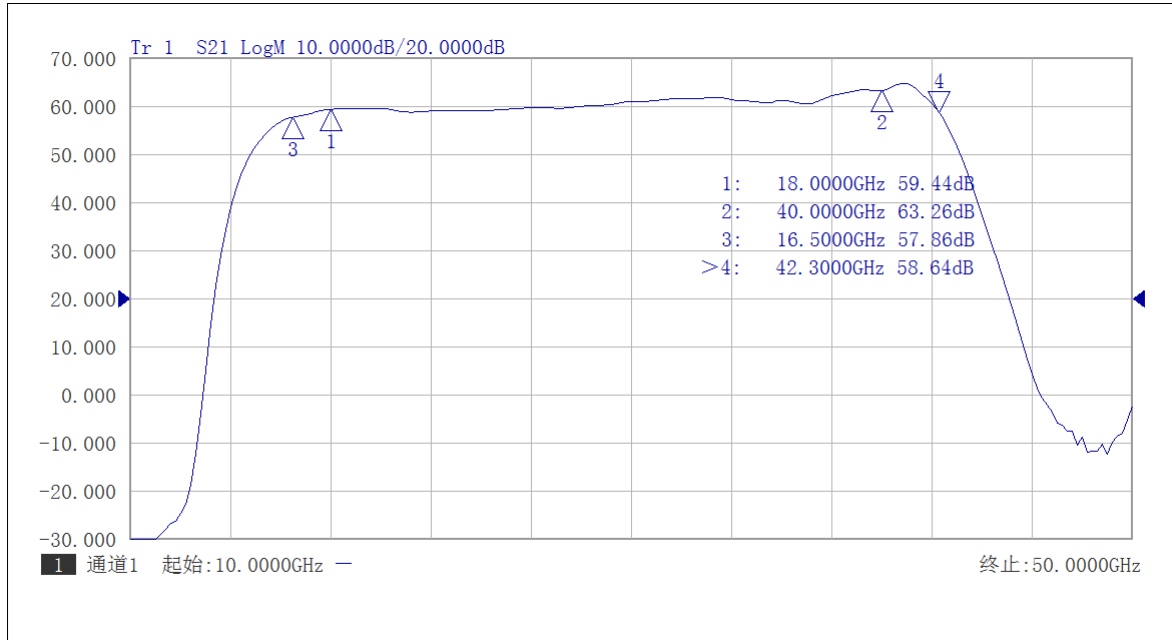
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

## Part Number Selection Guide

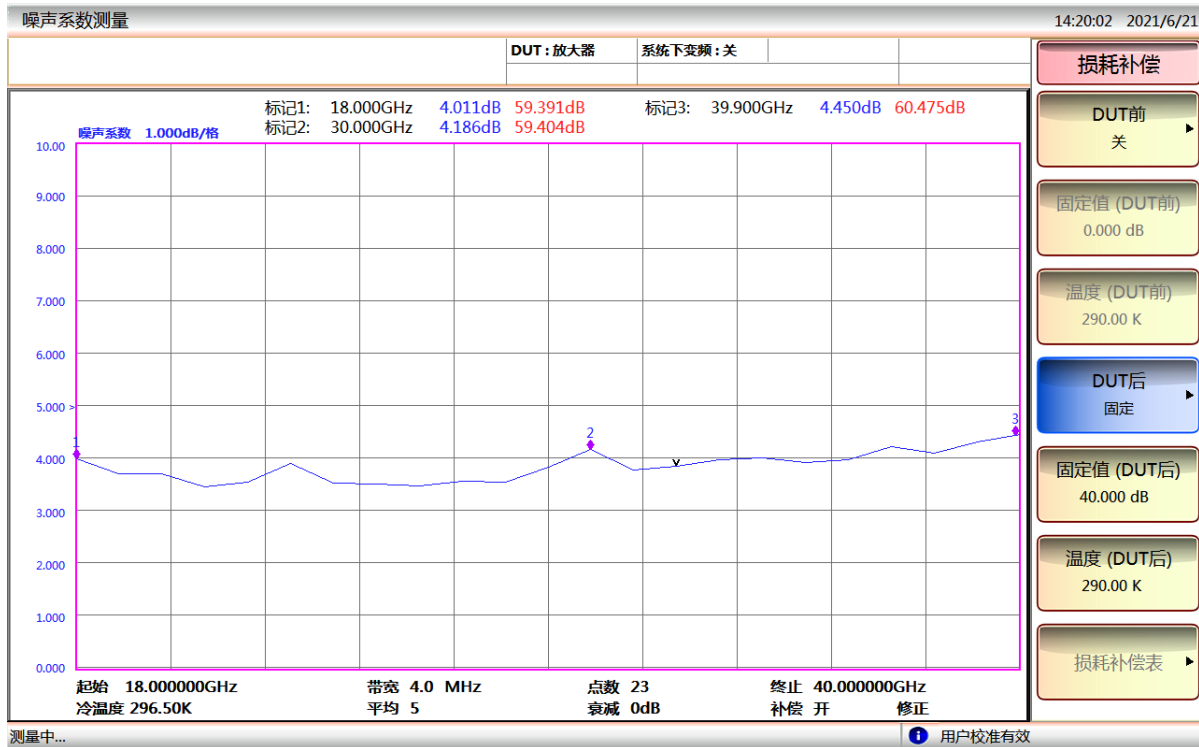
Item	Description
PN	Standard Module with DC Power Supply
PN- <b>LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter



## Test Data:

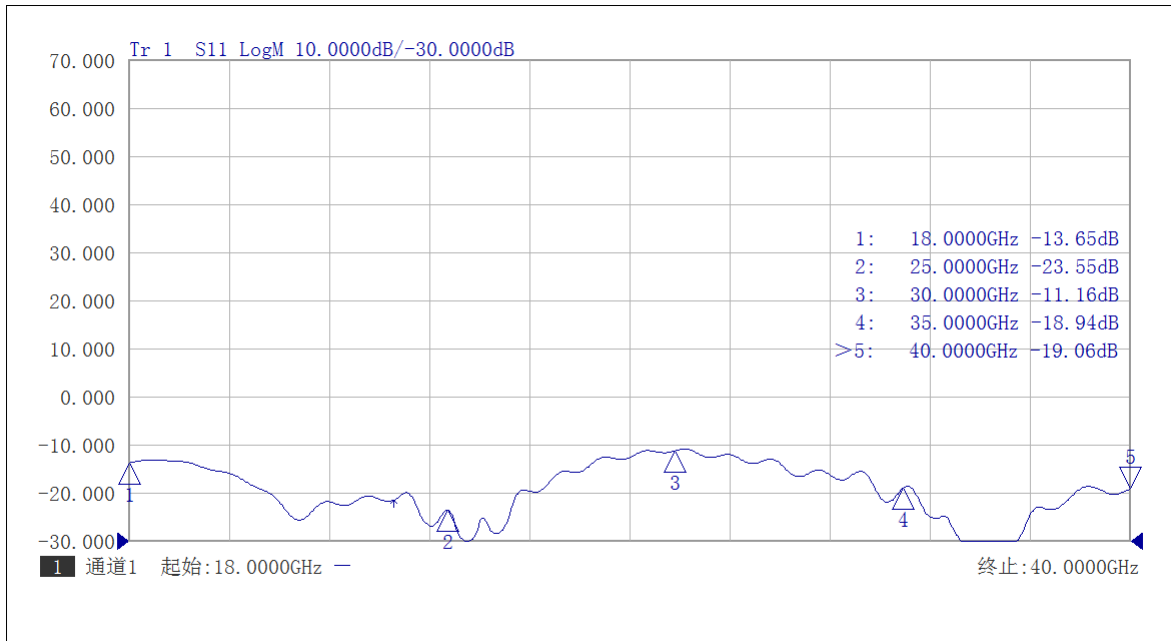


Gain vs Frequency

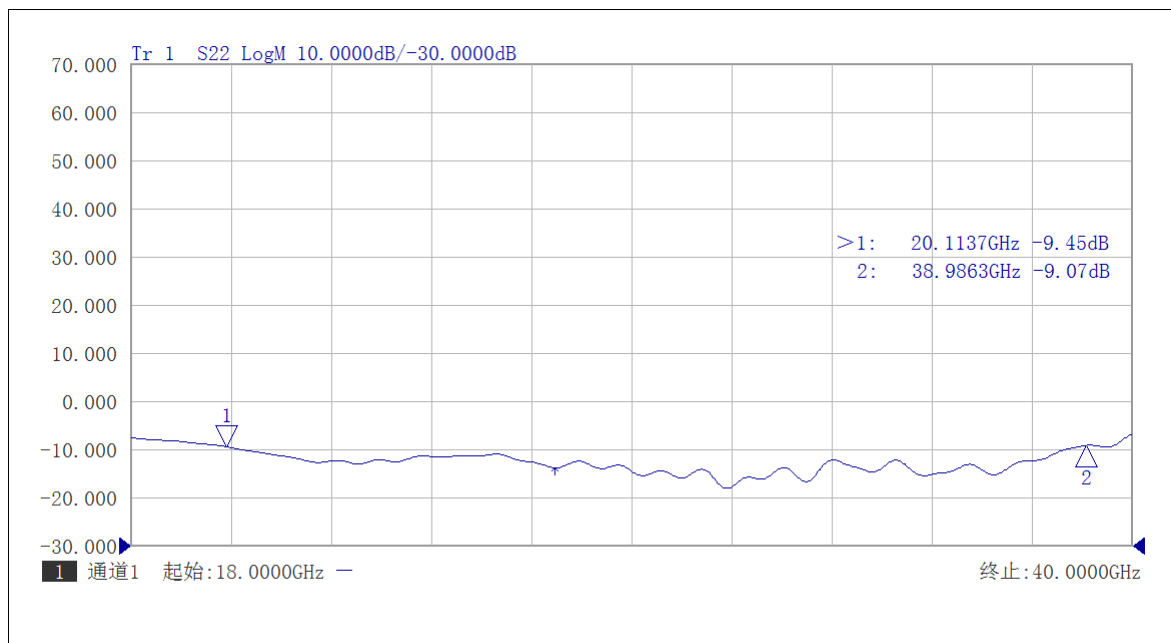


NF Test vs Frequency





S11 Return Loss vs Frequency



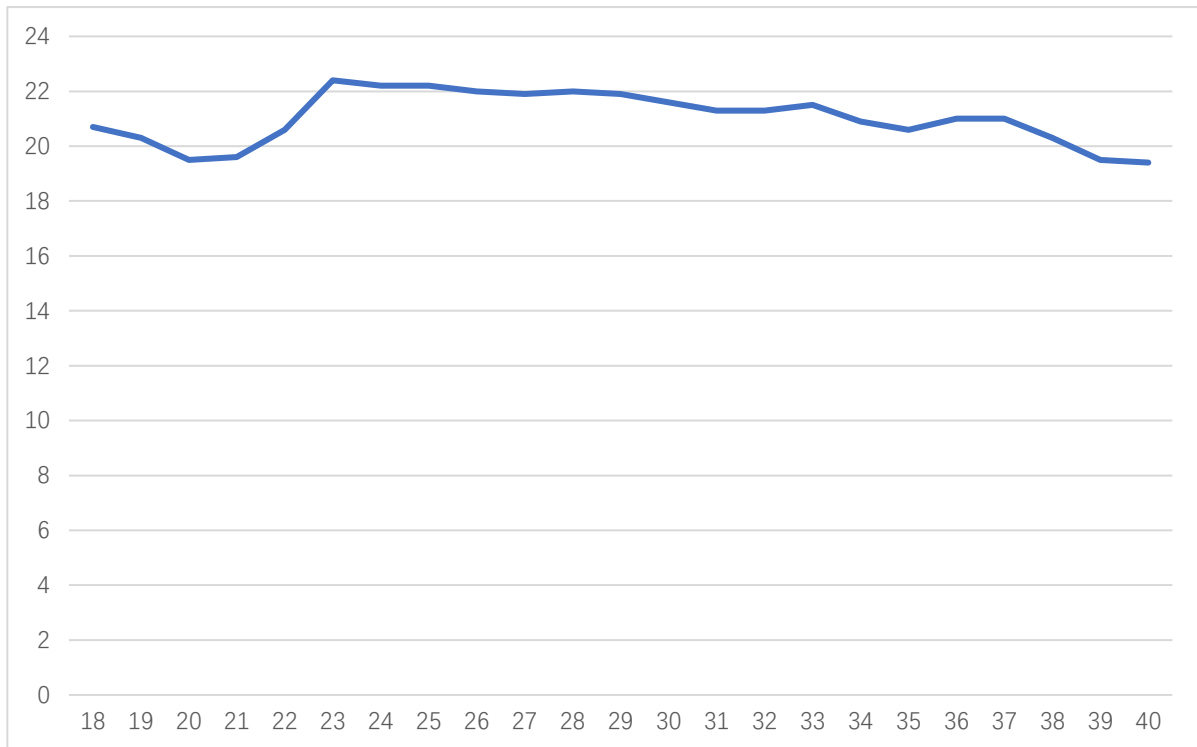
S22 Return Loss vs Frequency



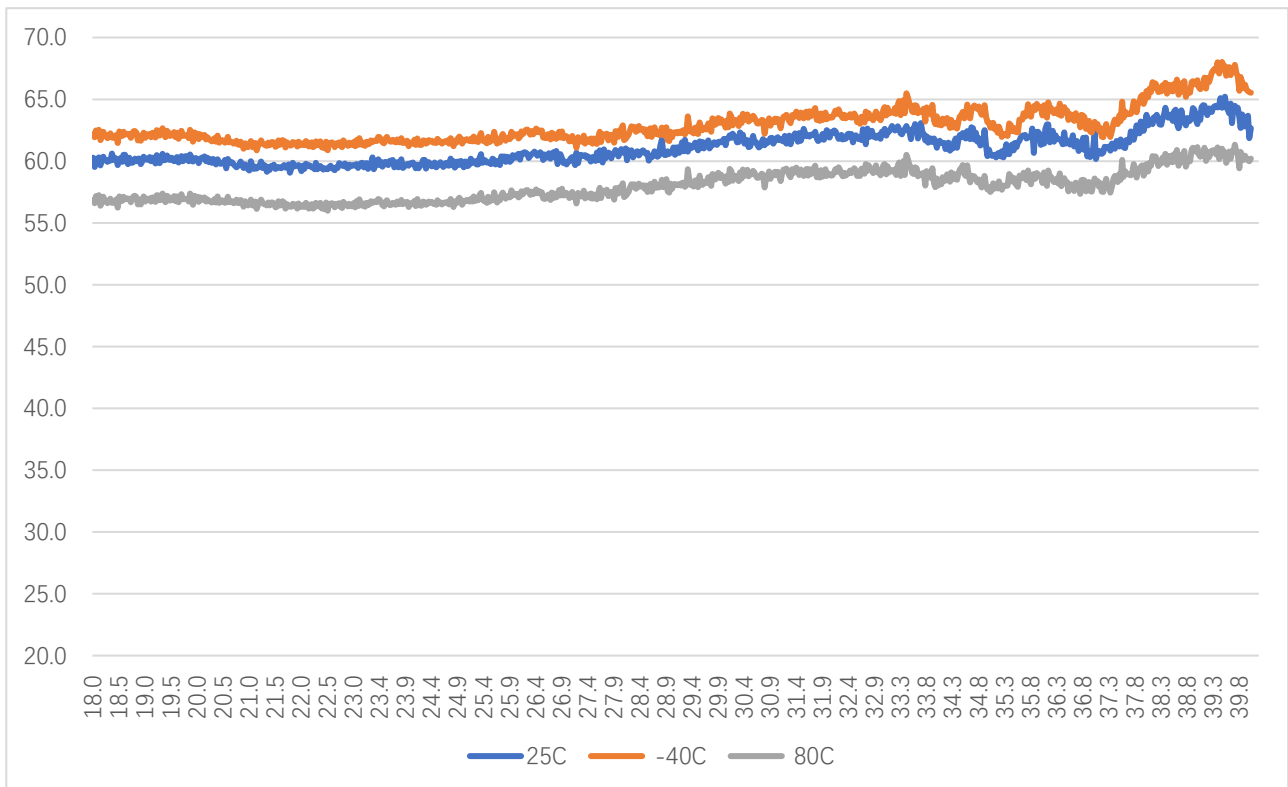


# AT-LNA-1840-6004P20

18-40GHz Super High Gain, LNA



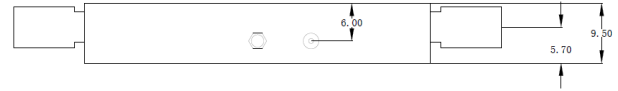
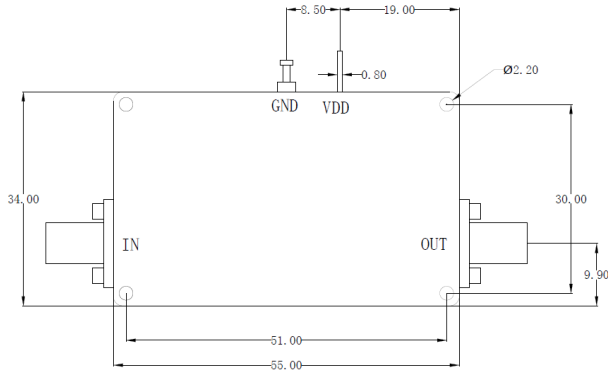
Pout vs Frequency



Gain vs Temp

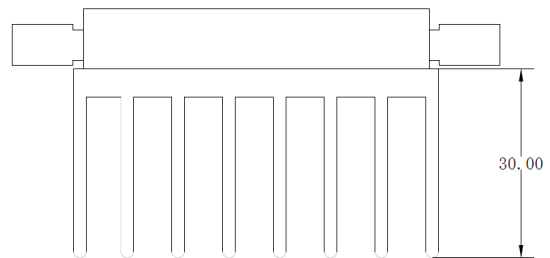
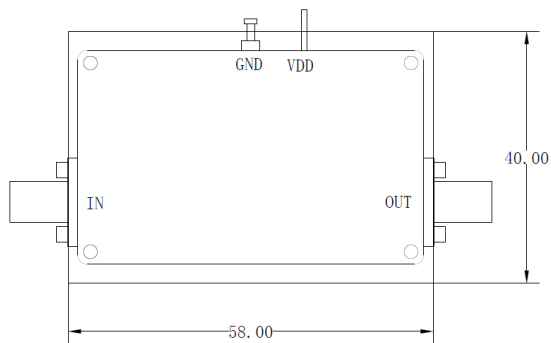


## Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Length 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 remove it or use their own heatsink according to actual situation.

Heatsink required during operation

