

# 1-18GHz Low Noise Amplifier

## High Gain=53dB, NF=2dB



### Product Overview

AT-LNA-0118-5302X is high gain low noise amplifier with 53dB gain in the frequency of 1-18GHz. The DC power requirement is +5V/180mA. 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 +40dBm, 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: 1-18GHz
- ✓ Small signal gain: 53dB
- ✓ NF=2dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		1-18GHz	
Gain	50dB	53dB	
Gain Flatness		+/-2dB	+/-4dB
NF		1.8dB	2.5
P1dB		+15dBm	
Psat		+17dBm	
Drain Supply		+5V	+8V
Current		180 mA	
Input Return Loss		-8dB	
Output Return Loss		-10dB	
Spec Temp		25C	





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### Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	50g
Size:	See outline

### Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+10 dBm
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

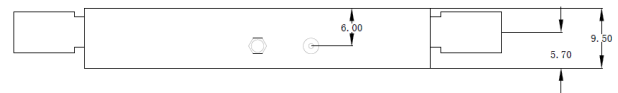
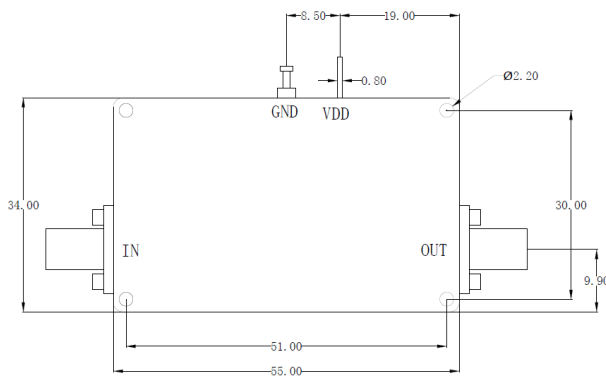
Item	Description
PN	Stand Module with DC Power Supply
PN- <b>LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter



## Test Data (25C)

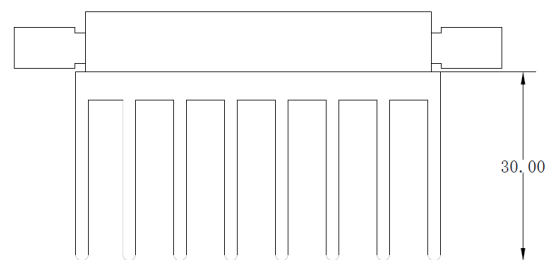
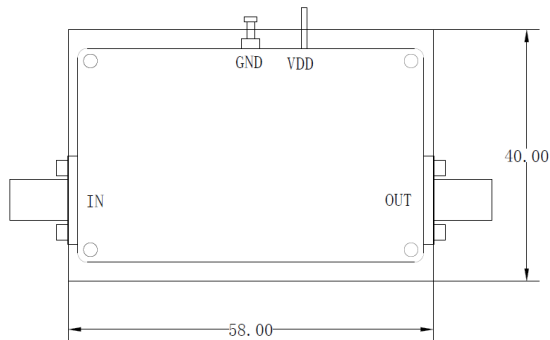
Please note that test curves will vary slightly from unit to unit.  
To be added.

## 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

