

AT-LNA-0018-4002X

100MHz-18GHz Low Noise Amplifier

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Product Overview

AT-LNA-0018-4002X is high gain low noise amplifier with 40dB gain in the frequency of 100MHz-18GHz. The DC power requirement is +8V/150mA. 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

Advantages

- ✓ Frequency: 100MHz-18GHz
- ✓ Small signal gain: 40dB
- ✓ NF=2dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		100MHz-18GHz	
Gain	37	40 dB	
NF		2	3
P1dB		+15dBm	
Psat		+18dBm	
Drain Supply	+5V	+8V	+12V
Current		150 mA	
Input Return Loss		-10dB	
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)	55g
Size:	45x34x9.5 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+20 dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

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

Caution:

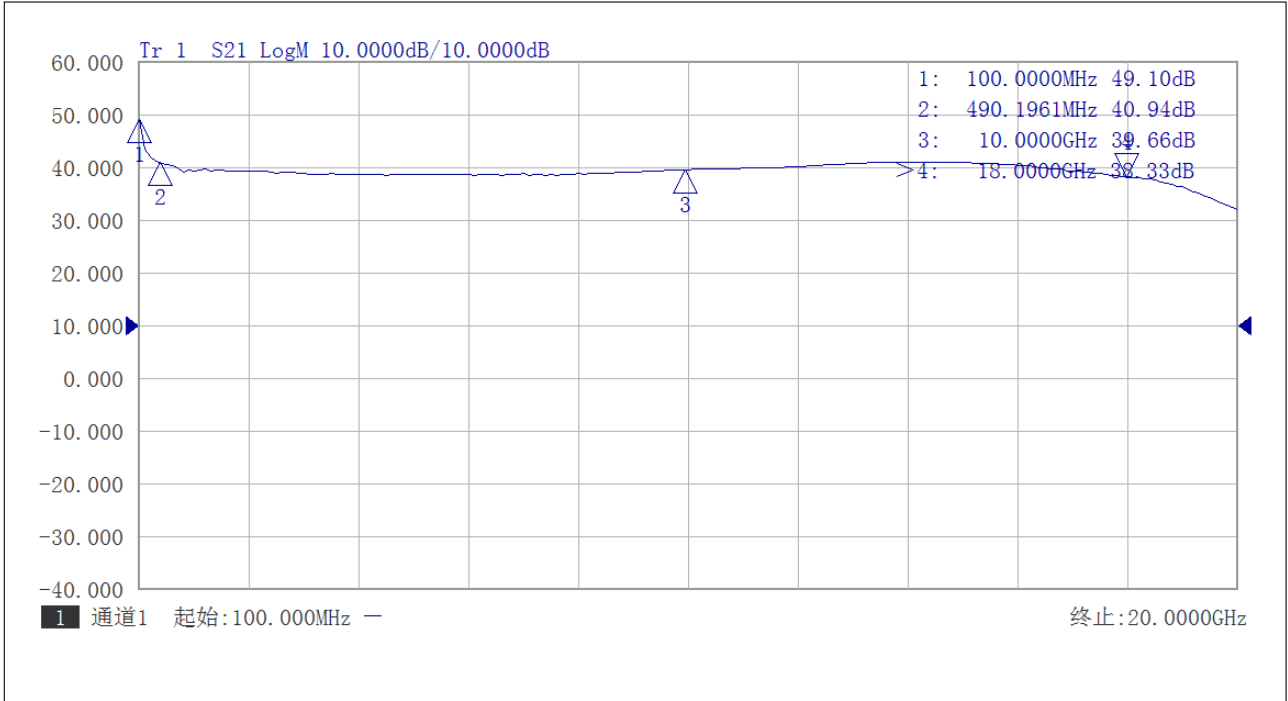
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

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.



Test Data

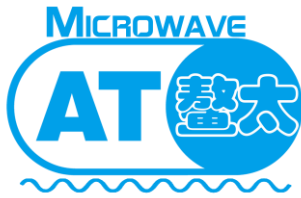


Gain vs Frequency



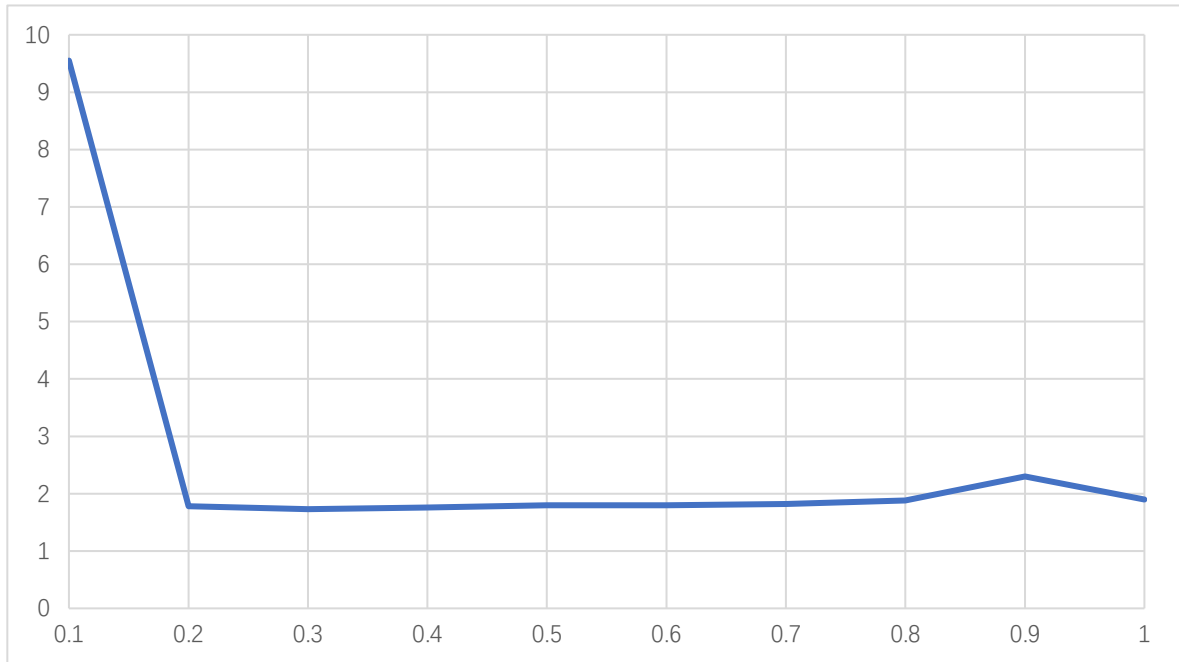
Input and Output Return Loss vs Frequency



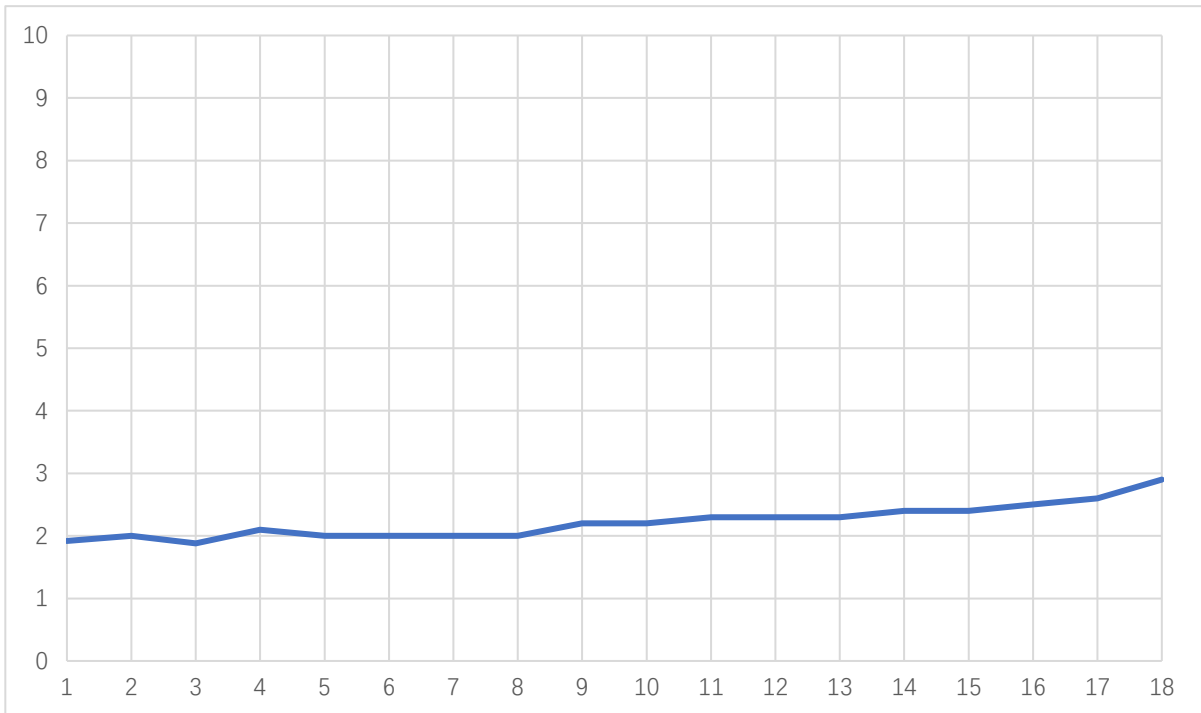


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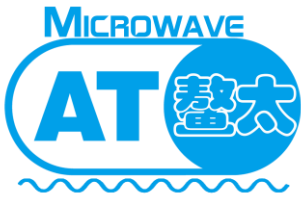


NF vs Frequency 0.1-1GHz



NF vs Frequency 1-18GHz

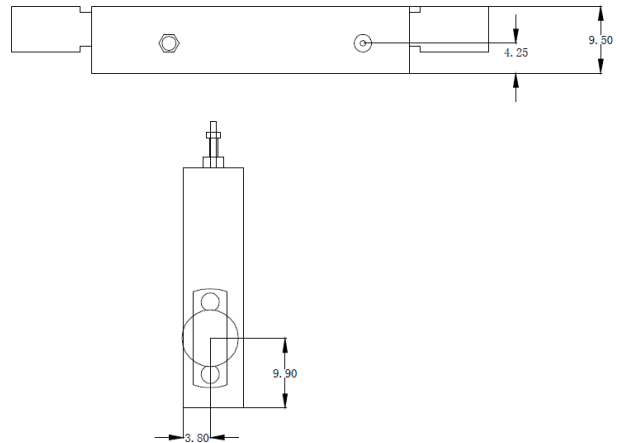
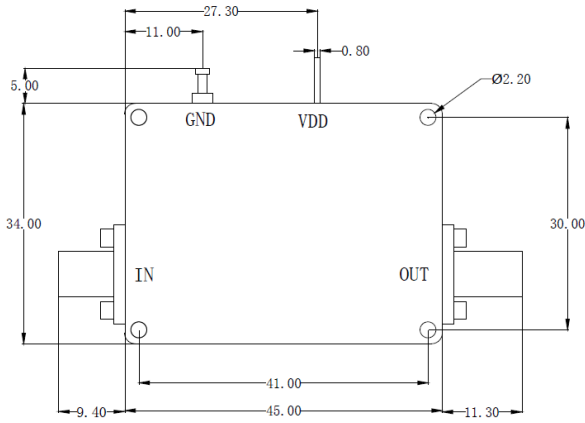




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Dimension: (unit in mm)



	<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.

