

1-18GHz Low Noise Amplifier



Product Overview

AT-LNA-0118-4002X is high gain low noise amplifier with 40dB gain in the frequency of 1-18GHz. The DC power requirement is +5V/130mA. 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: 1-18GHz
- ✓ 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		1-18GHz	
Gain	38dB	40dB	
Gain Flatness		+/-1dB	+/-2dB
NF		1.8dB	2.5
P1dB		+15dBm	
Psat		+17dBm	
Drain Supply		+5V	+8V
Current		130 mA	
Input Return Loss		-8dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-LNA-0118-4002X

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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:	45x34x9.5 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
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:

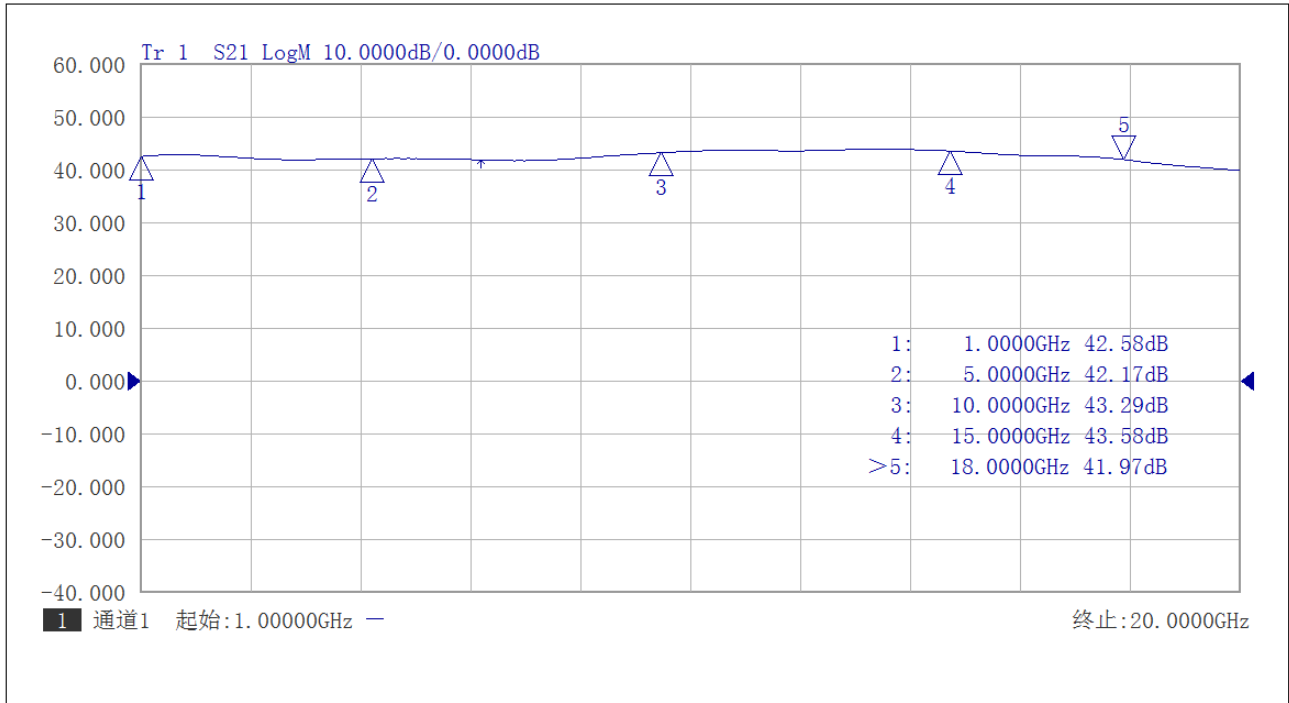
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

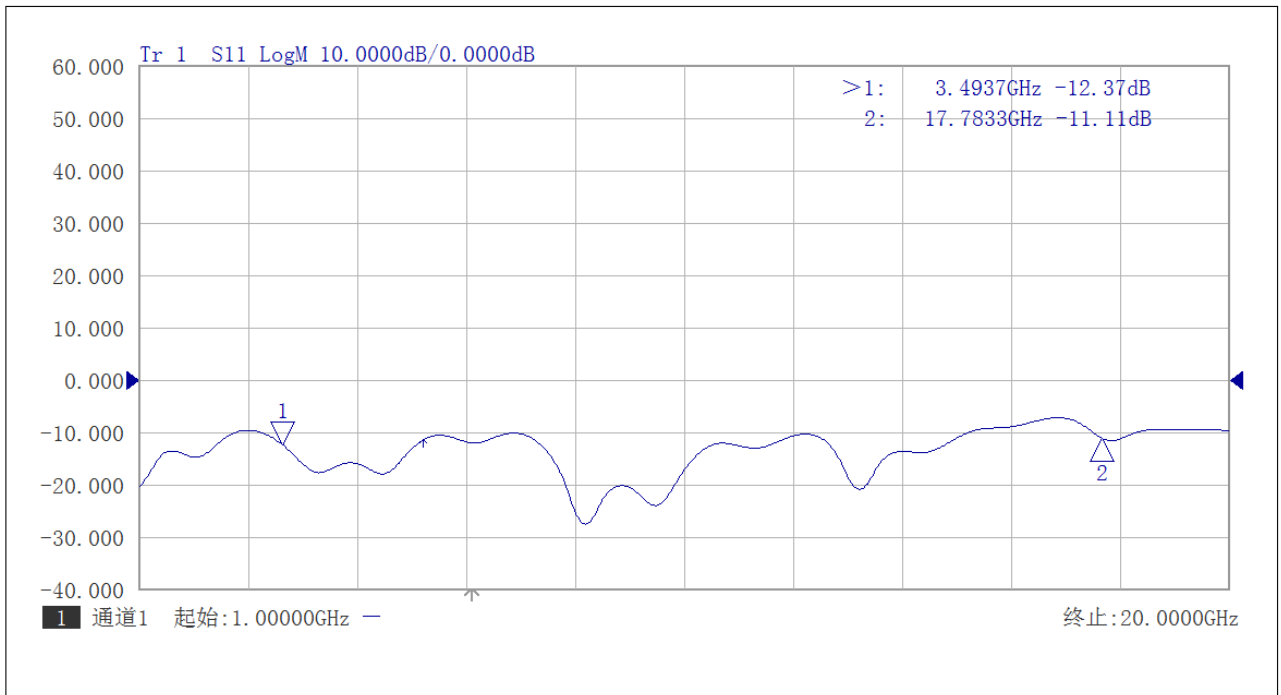
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:

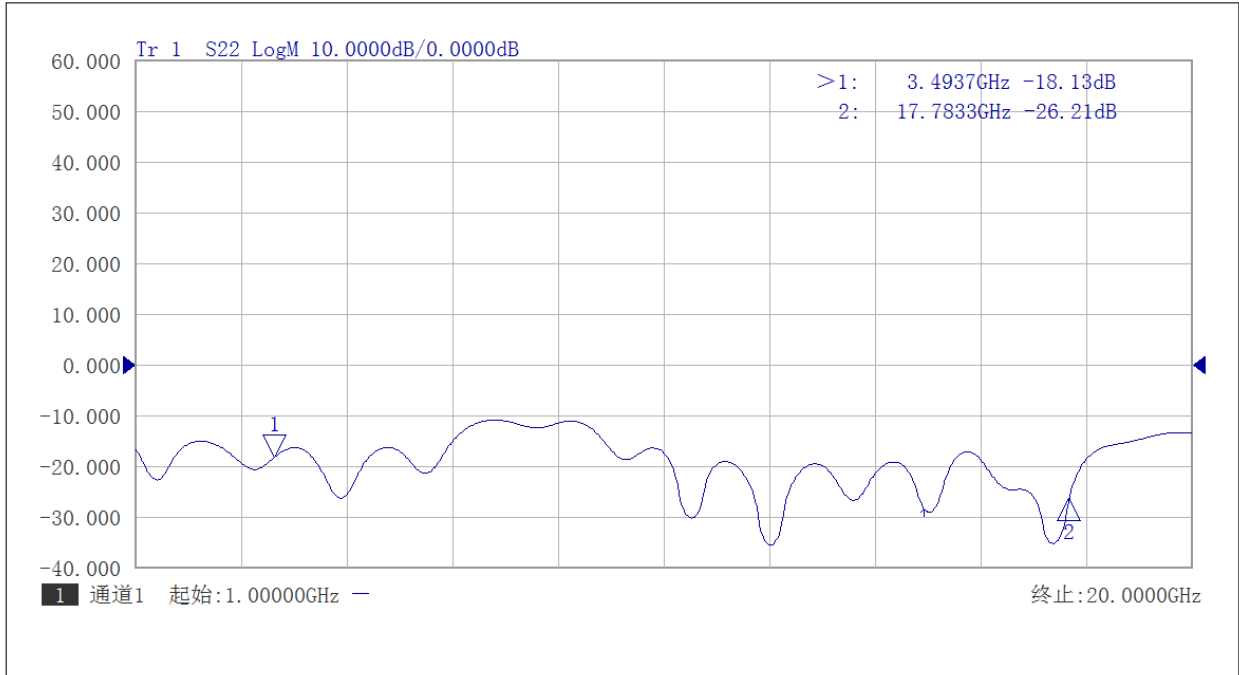


Gain vs Frequency

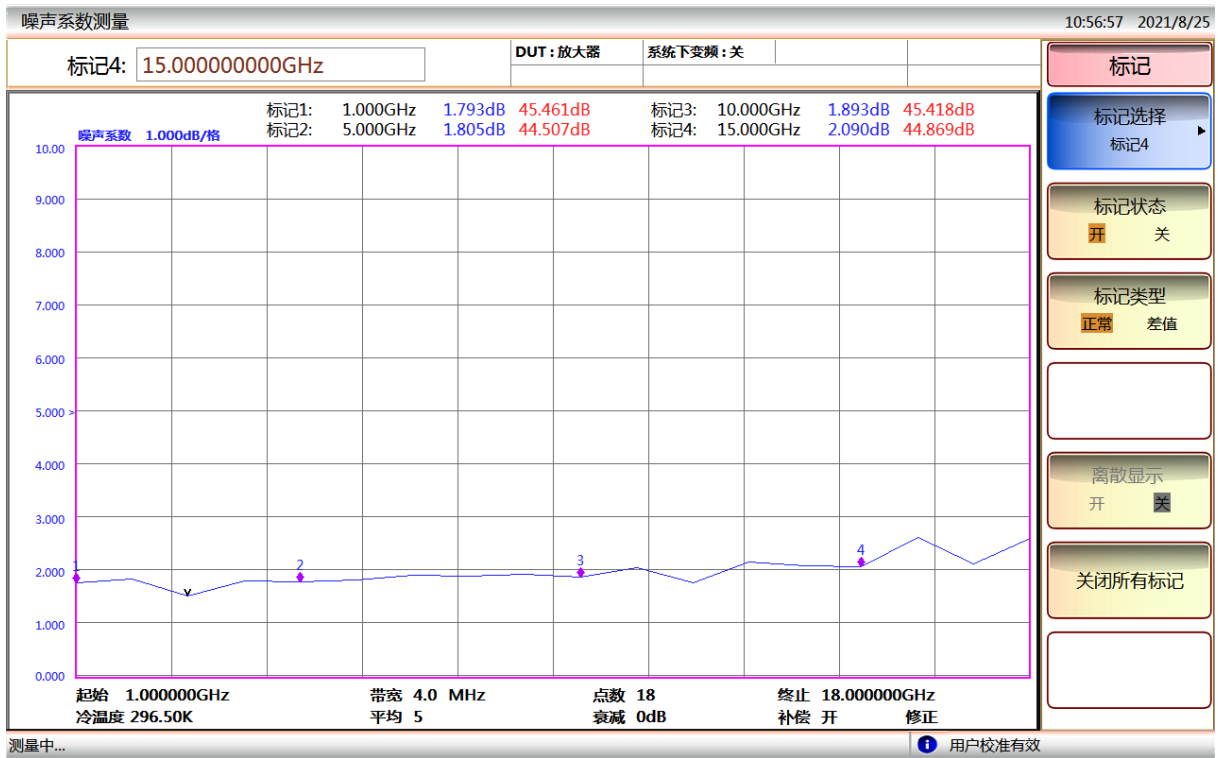


Input Return Loss vs Frequency



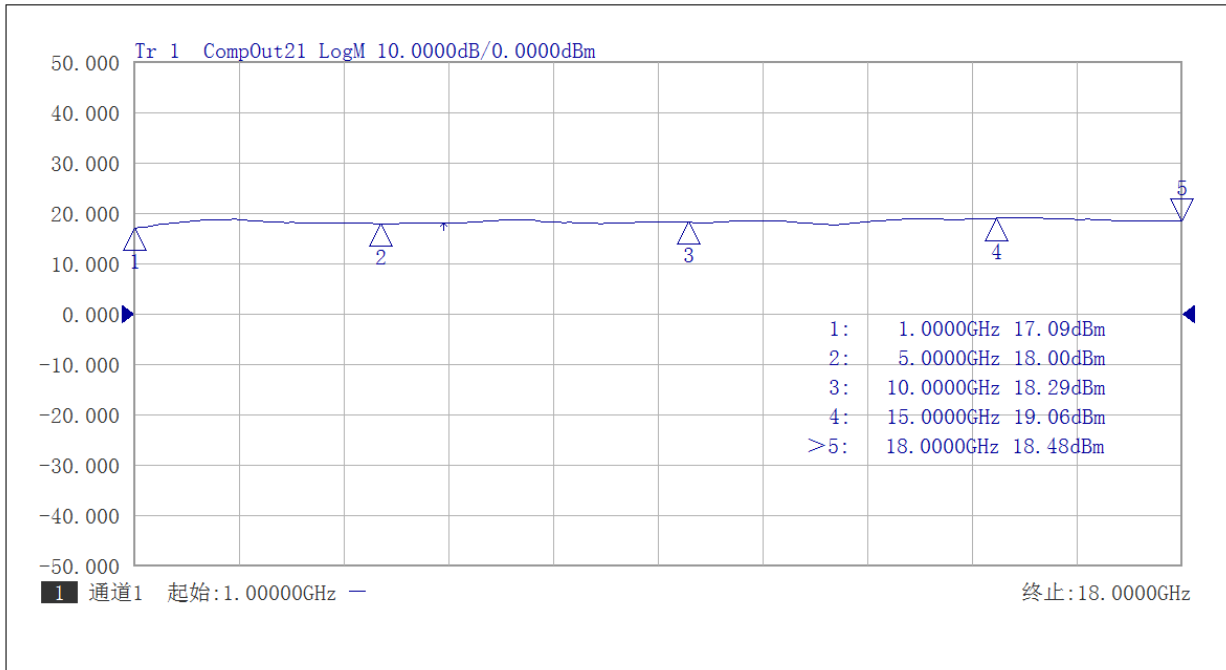


Output Return Loss vs Frequency

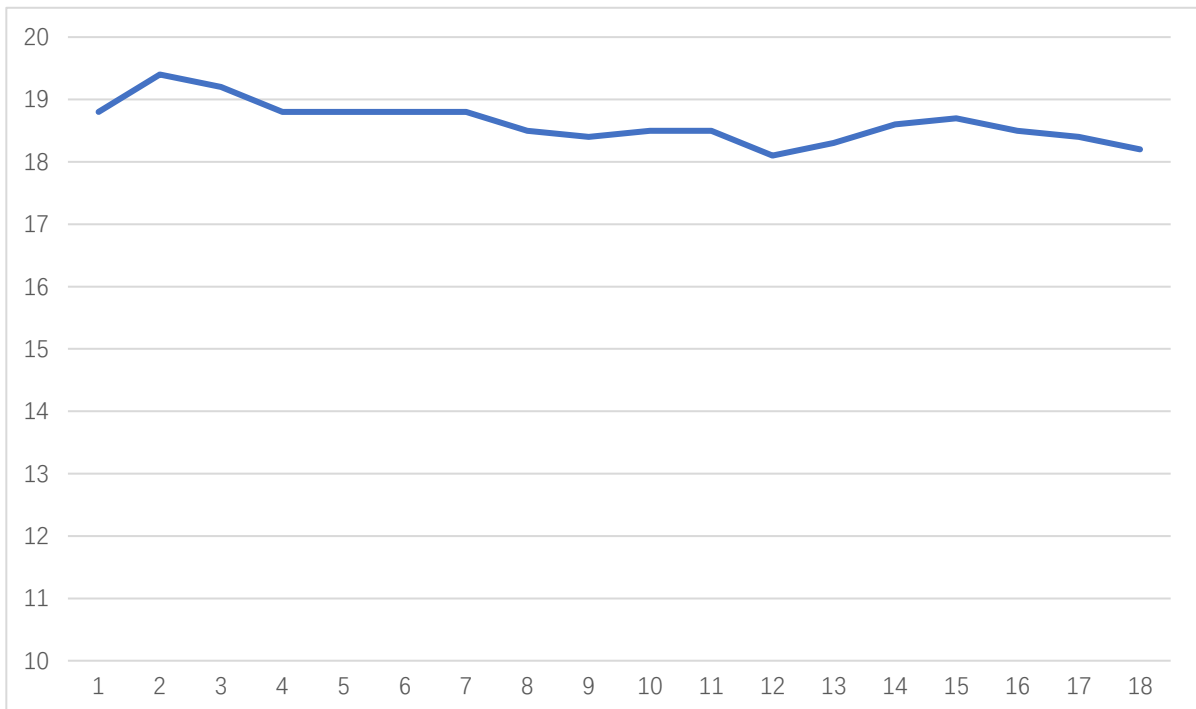


NF vs Frequency





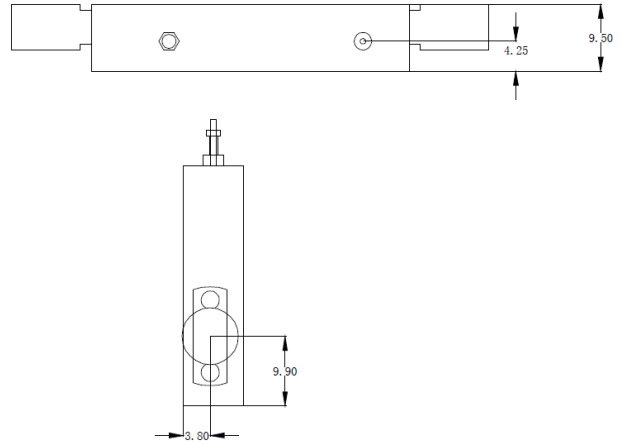
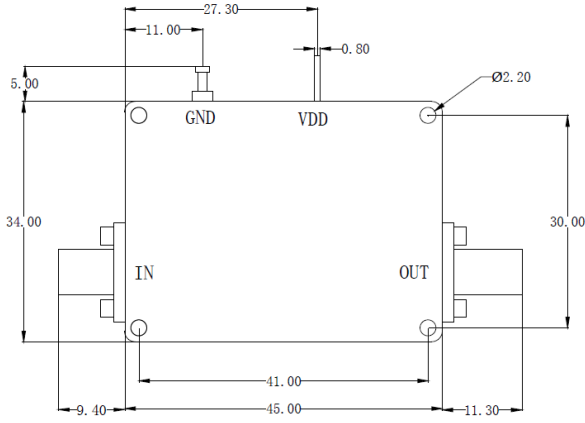
P1dB vs Frequency



Psat vs Frequency



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.

