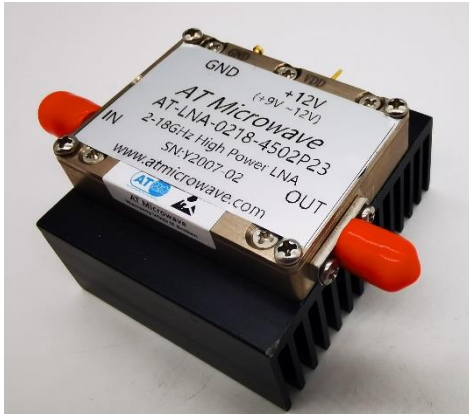


2-18GHz Low Noise Amplifier, High Power



Product Overview

AT-LNA-0218-4502P23 is high gain low noise amplifier with 45dB gain in the frequency of 2-18GHz. The DC power requirement is +9V/450mA. 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 +27dBm, and connectors from SMA to 1.85mm. If you don't find what you need, just send us email sales@atmicrowave.com

Advantages

- ✓ Frequency: 2-18GHz
- ✓ Small signal gain: 45dB
- ✓ NF=2dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		2-18GHz	
Gain	42	45 dB	
NF		2	3.5
Input Power		-30dBm	-20dBm
P1dB	+20	+22dBm	
Psat		+23dBm	
Drain Supply		+9V	+12V
Current		450 mA	
Input VSWR		1.5	2.5
Output VSWR		1.5	2.5
Spec Temp		25C	





AT-LNA-0218-4502P23

2-18GHz High Gain Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Nickel Plated
Weight (Without Heatsink)	80g
Size:	45x34x8.5 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:

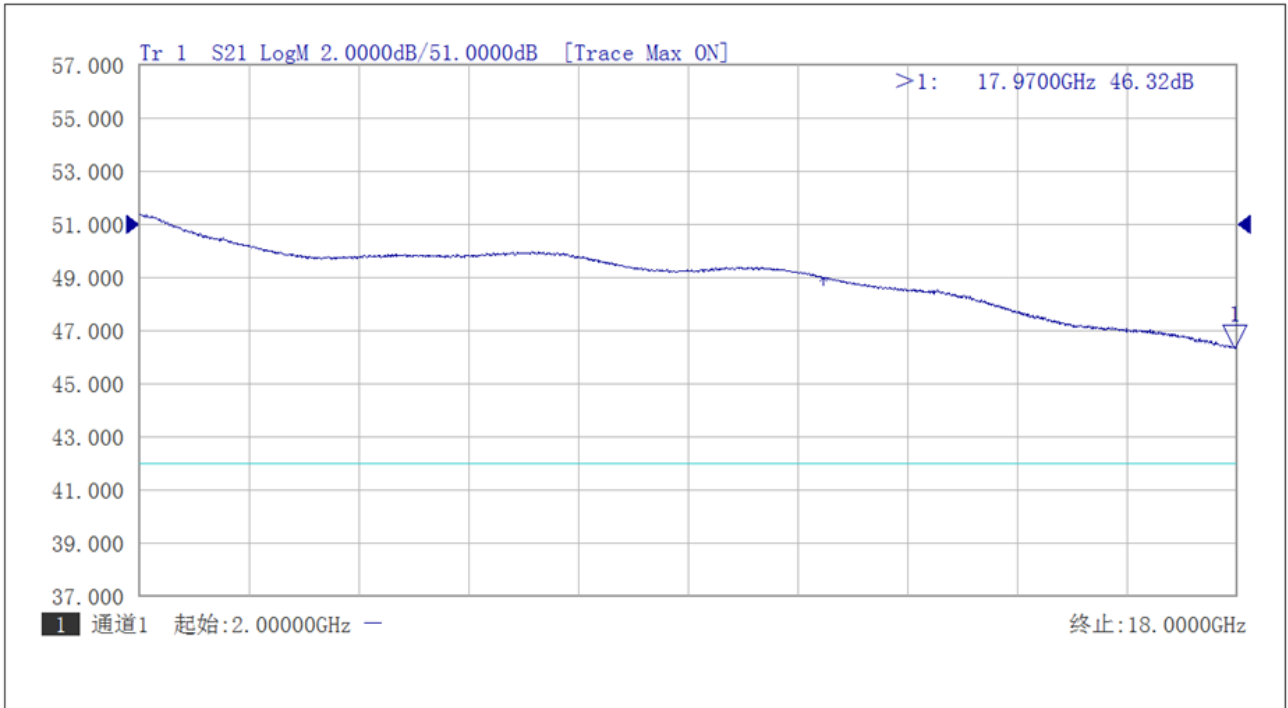
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

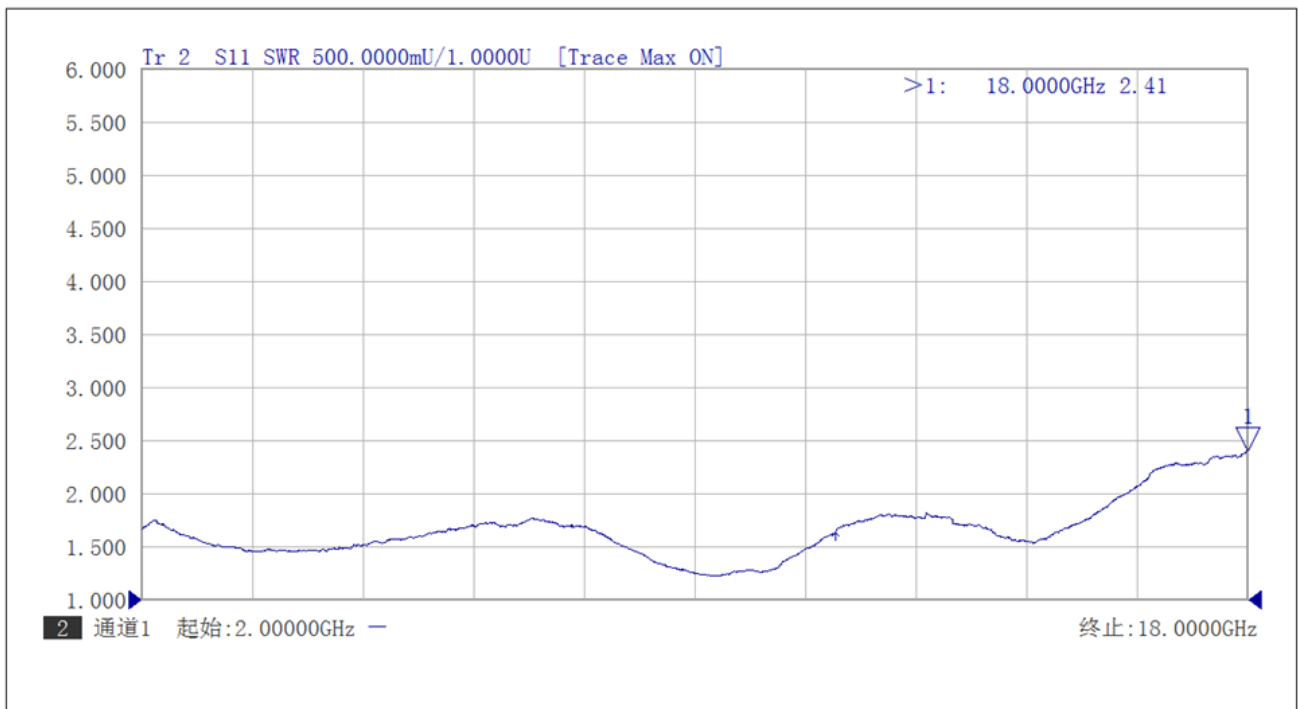
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:

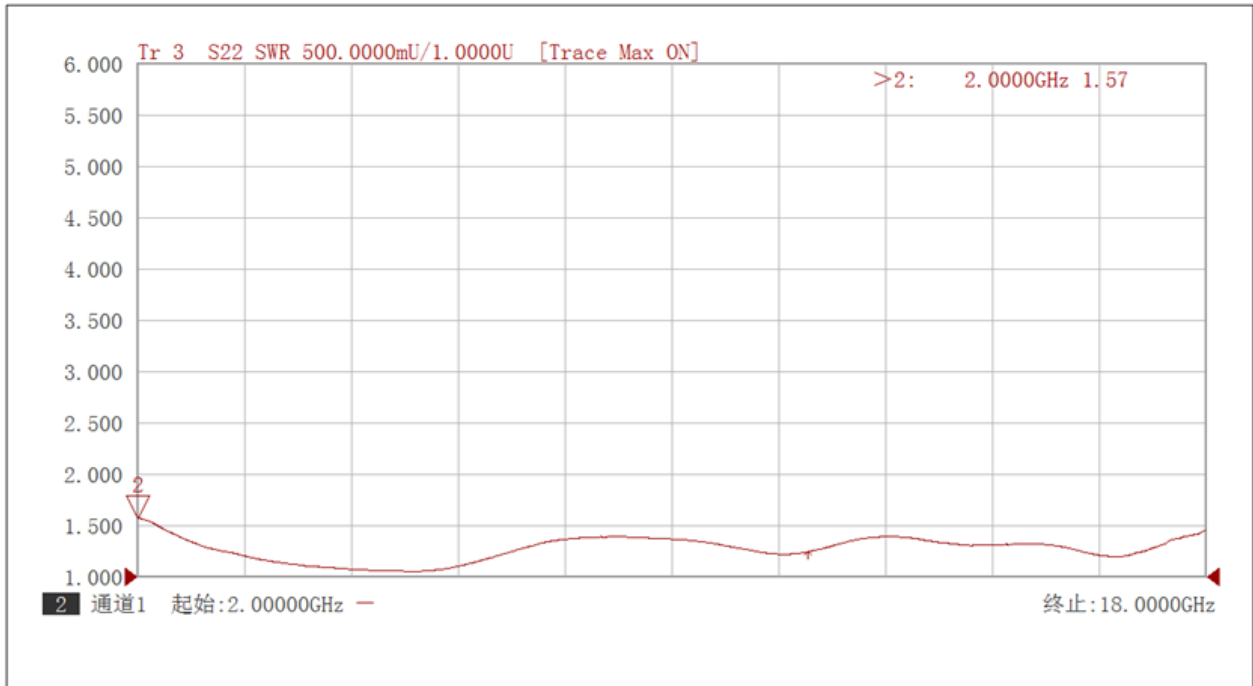


Gain vs Frequency



Input VSWR Vs Frequency





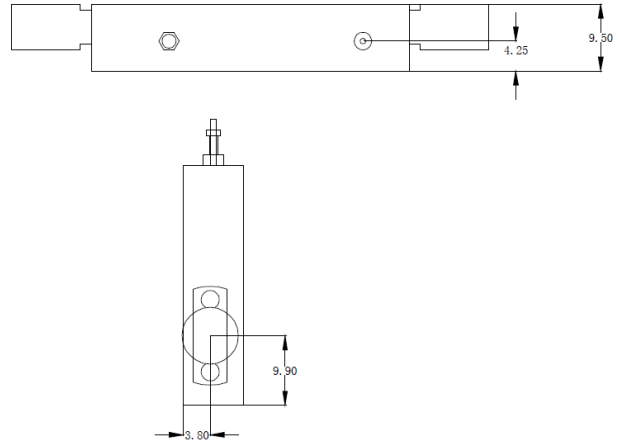
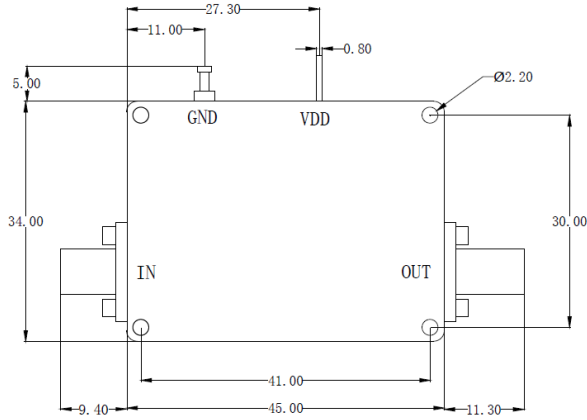
Output VSWR vs Frequency



NF vs Frequency

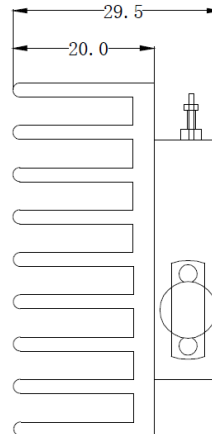
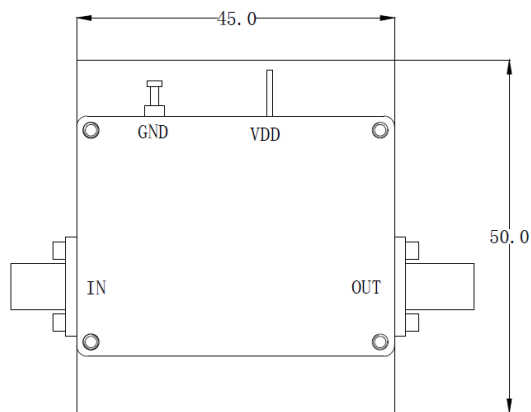


Dimension: (unit in mm)



	<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

