

2-50GHz Low Noise Amplifier



Product Overview

AT-LNA-0250-2505C is high gain low noise amplifier with 25dB gain in the frequency of 2-50GHz. The DC power requirement is +5V/160mA. The module is with 2.4mm 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: 2-50GHz
- ✓ Small signal gain: 25dB
- ✓ NF=5dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		2-50GHz	
Gain	23dB	25 dB	
Gain Flatness (2-45GHz)		+/-2dB	
NF		2-40GHz: 5dB 40-50GHz: 6.5dB	6dB 8dB
P1dB		2-40GHz: +10dBm	
Psat		2-40GHz: +15dBm 40-50GHz: +10dBm	
Drain Supply		+5V	+8V
Current		160 mA	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-LNA-0250-2505C

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Mechanical Information

Item	Description
Input Port	2.4mm Female
Output Port	2.4mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
Size:	30x30x14 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+12 dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

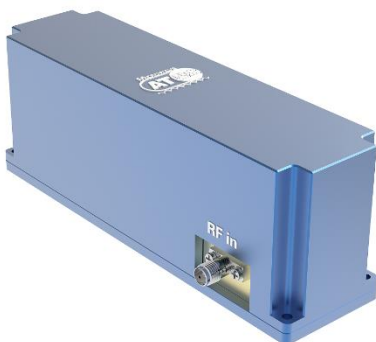
Note: -40 to +85C is available according to request.

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.

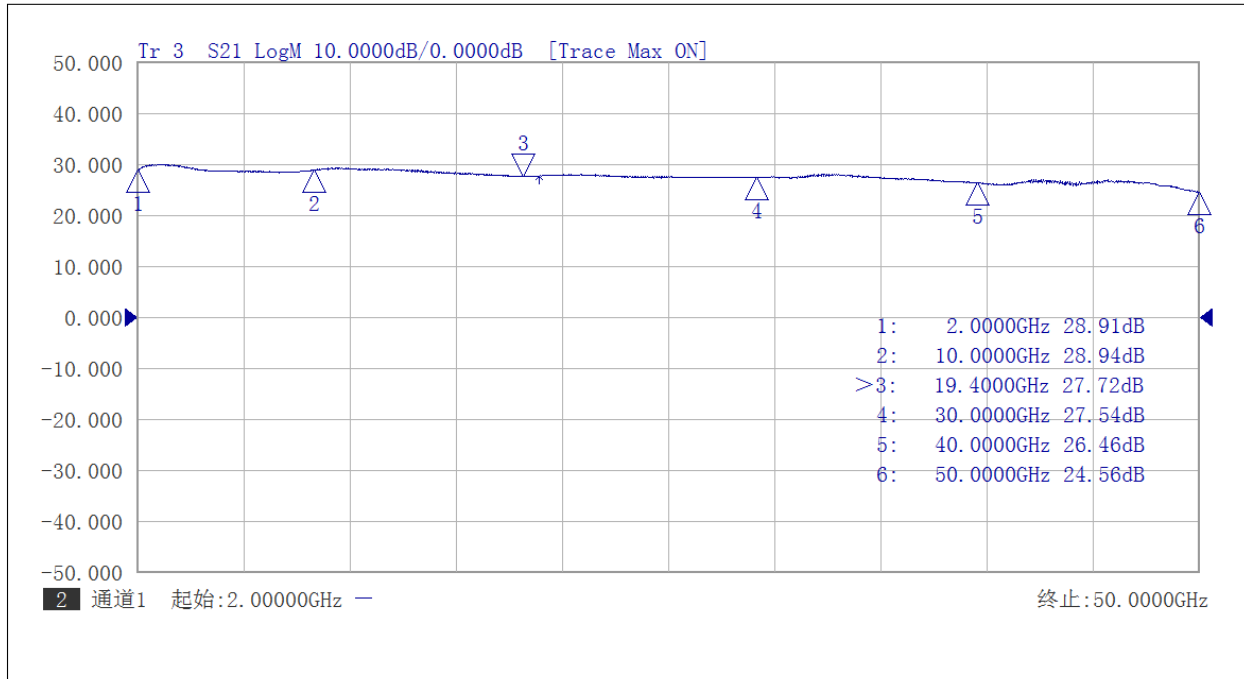
Part Number Selection Guide

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

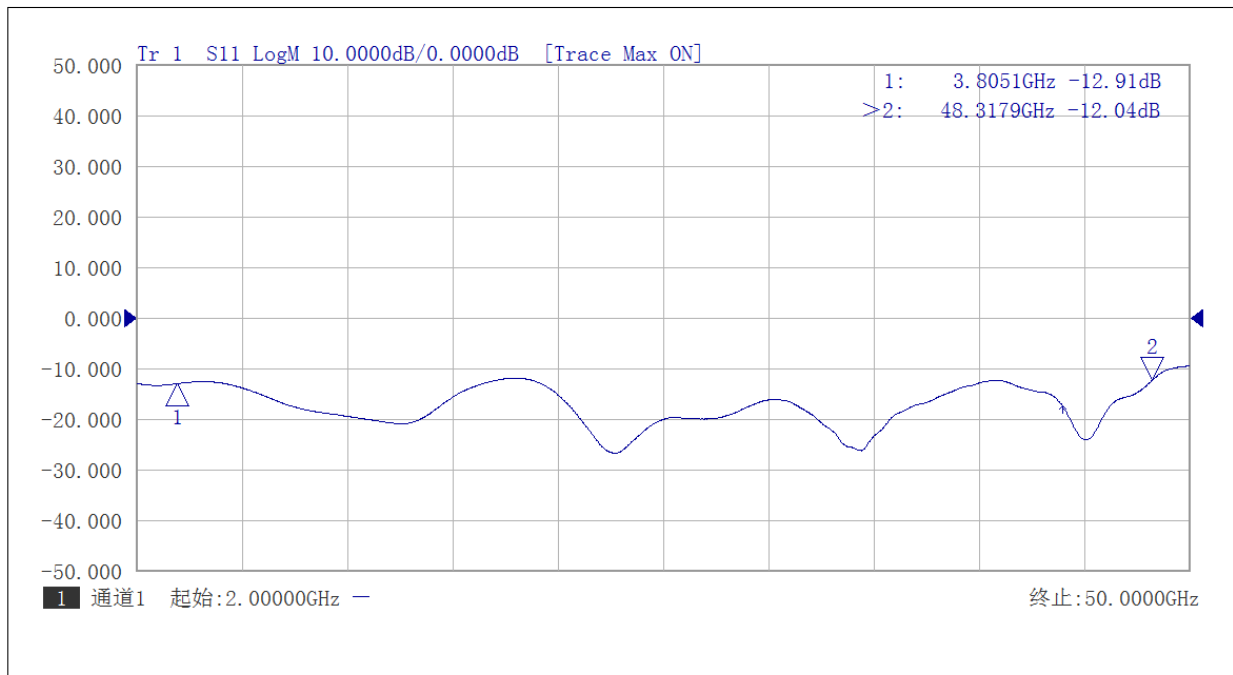


Test Data (25C)

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

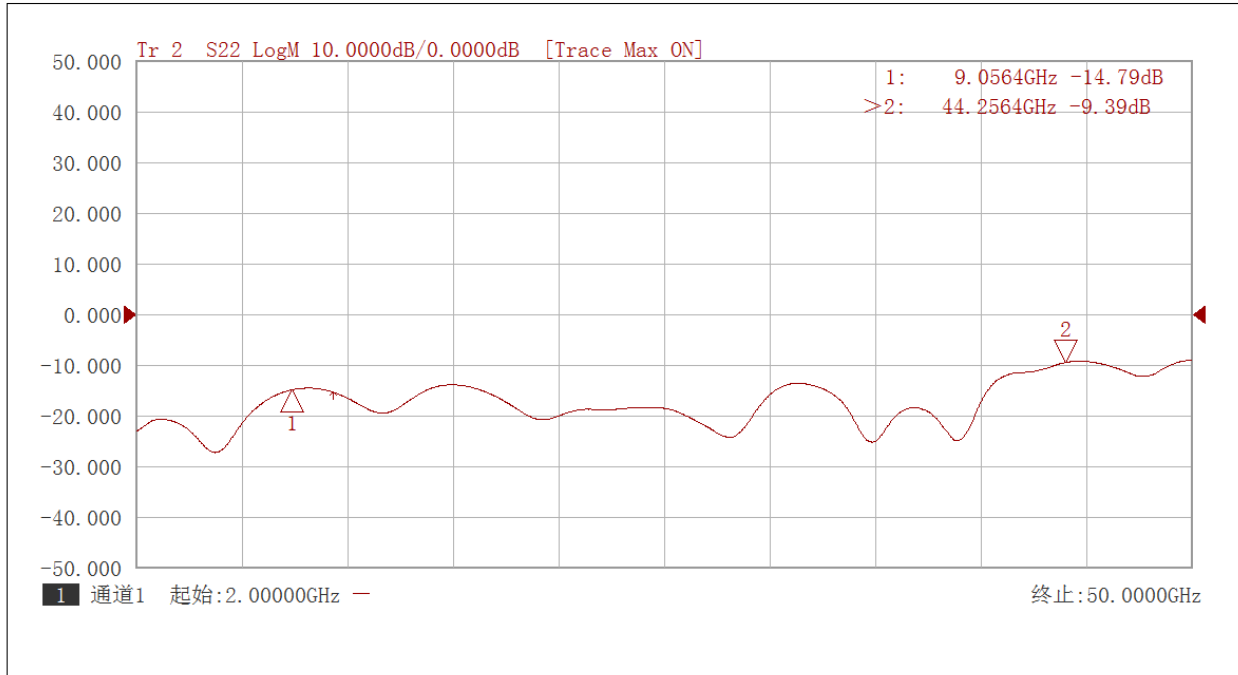


Gain vs Frequency

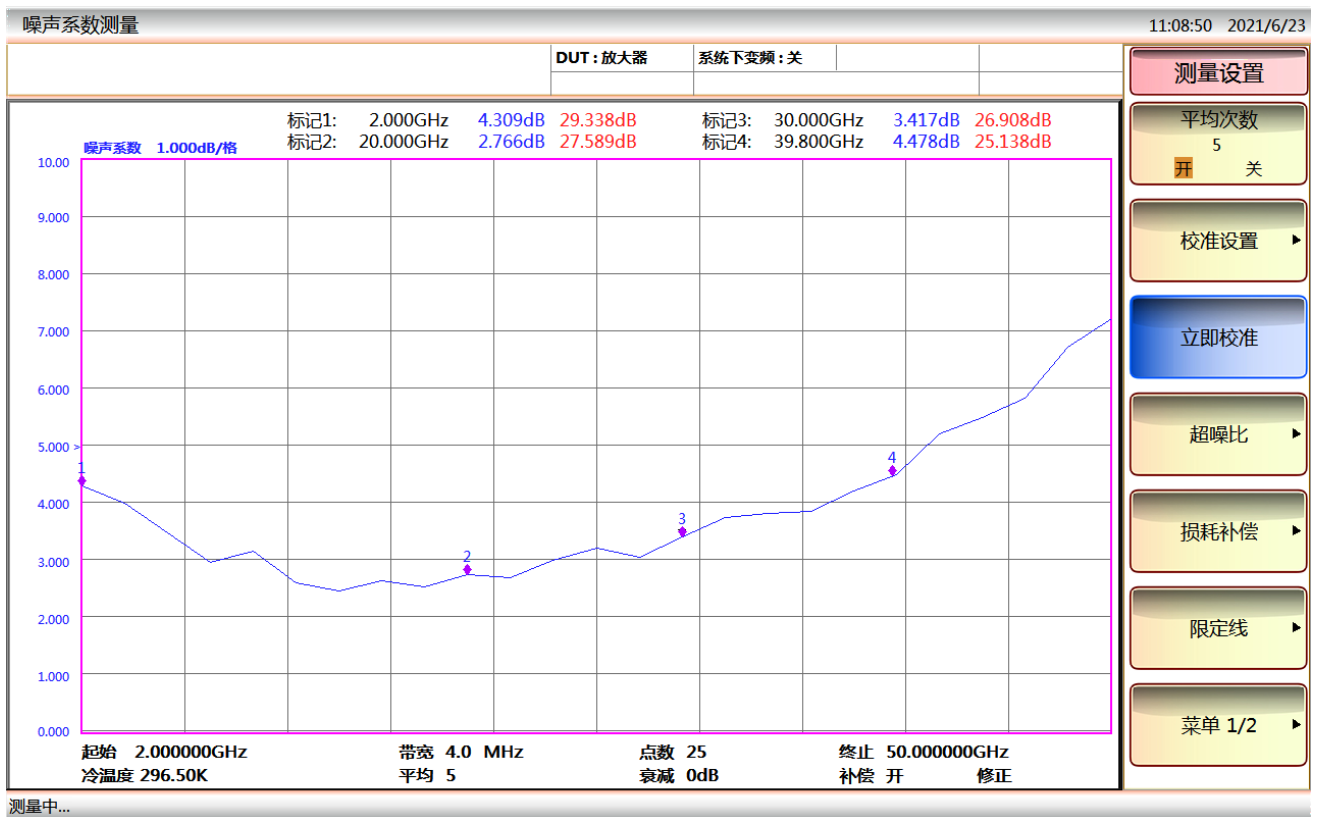


S11 Vs Frequency





S22 vs Frequency



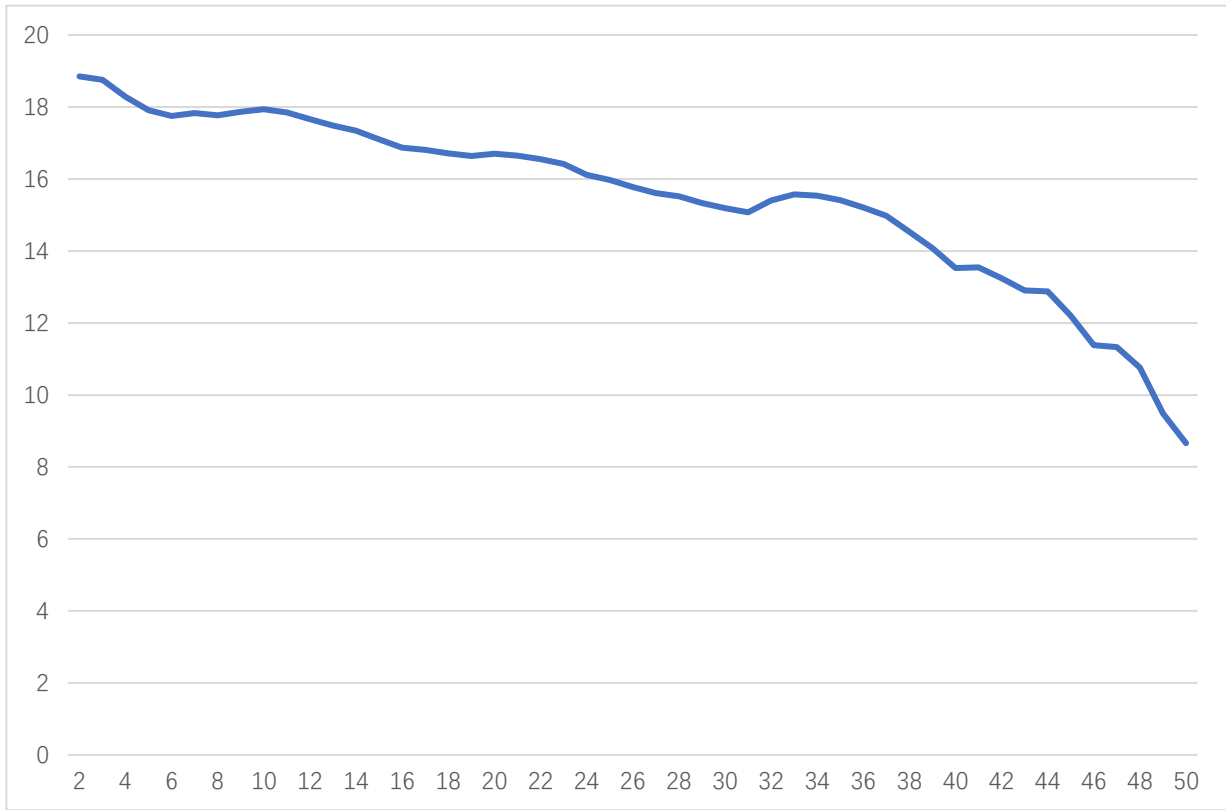
NF vs Frequency



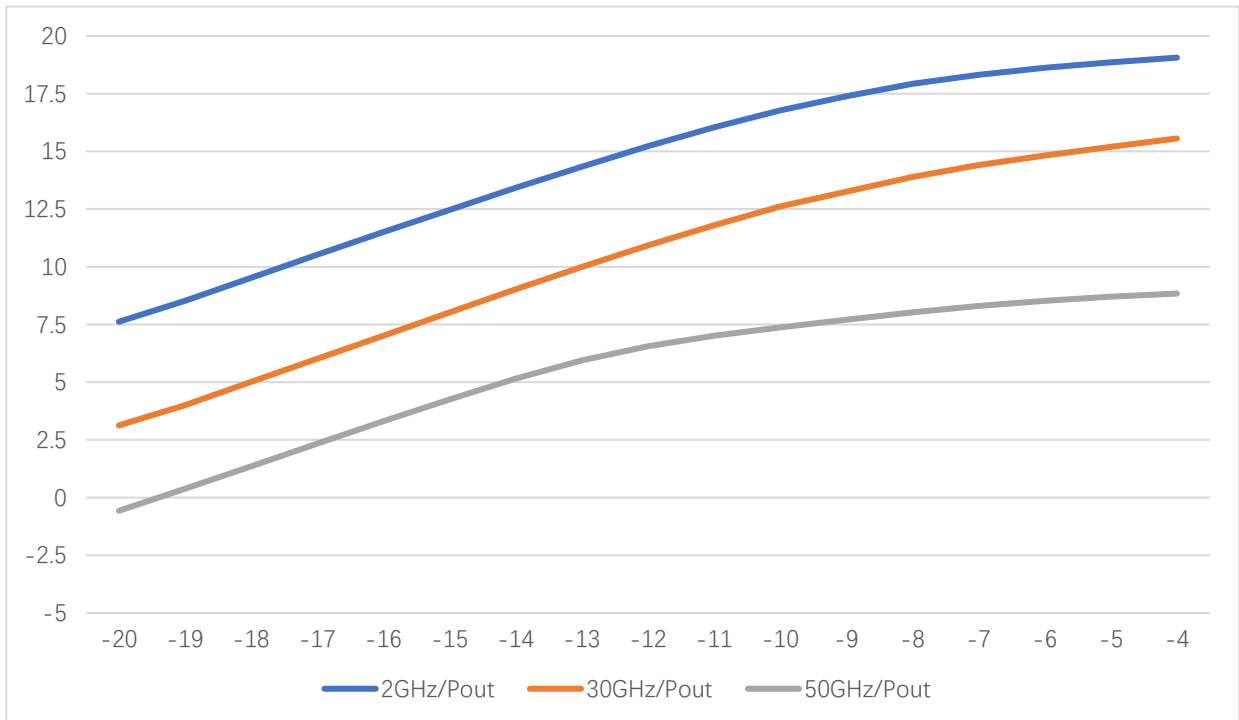


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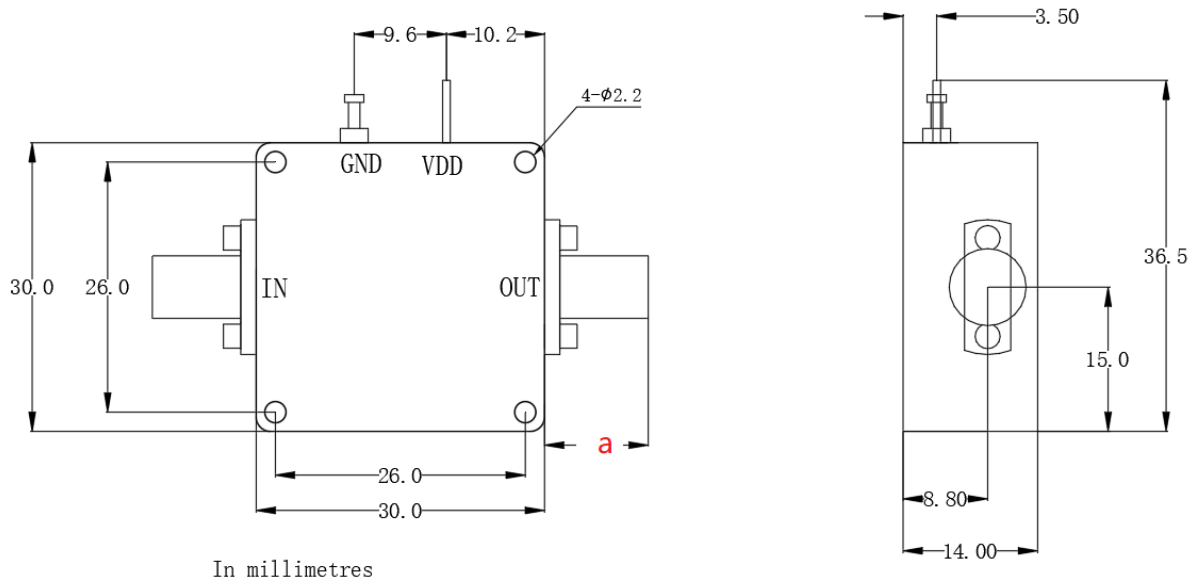
Psat vs Frequency



Pout vs Pin at 2/30/50GHz



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.

Heat Sink Required If Case Temp Higher Than 50C

