



AT-LNA-0043-5004C

10MHz-43.5GHz Low Noise Amplifier

10MHz-43.5GHz High Gain Low Noise Amplifier



Product Overview

AT-LNA-0043-5004C is high gain low noise amplifier with 50dB gain in the frequency of 0.01-43.5GHz. The NF performance is 4.5dB from 100MHz to 40GHz. The DC power requirement is +5V/280mA. The module is with 2.92mm connector.

The high gain LNA can be used in 5G communication, Optical communication and test equipment ,etc.

For more information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 0.01-43.5GHz
- ✓ Small signal gain: 50dB
- ✓ NF=4.5dB
- ✓ Pout=+15dBm

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-43.5GHz	
Gain	46dB	50dB	
Gain Flatness(3-40GHz)		+/- 3dB	
NF(1-40GHz)		4.5dB	6.5dB
P1dB		+13dBm	
Psat		+15dBm	
Input Return Loss	-5	-10dB	
Output Return Loss	-5	-10dB	
Drain Supply		+5V	+8V
Idd		250mA	350mA
Spec Temp		25C	





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Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
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 +147C

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

Notes:

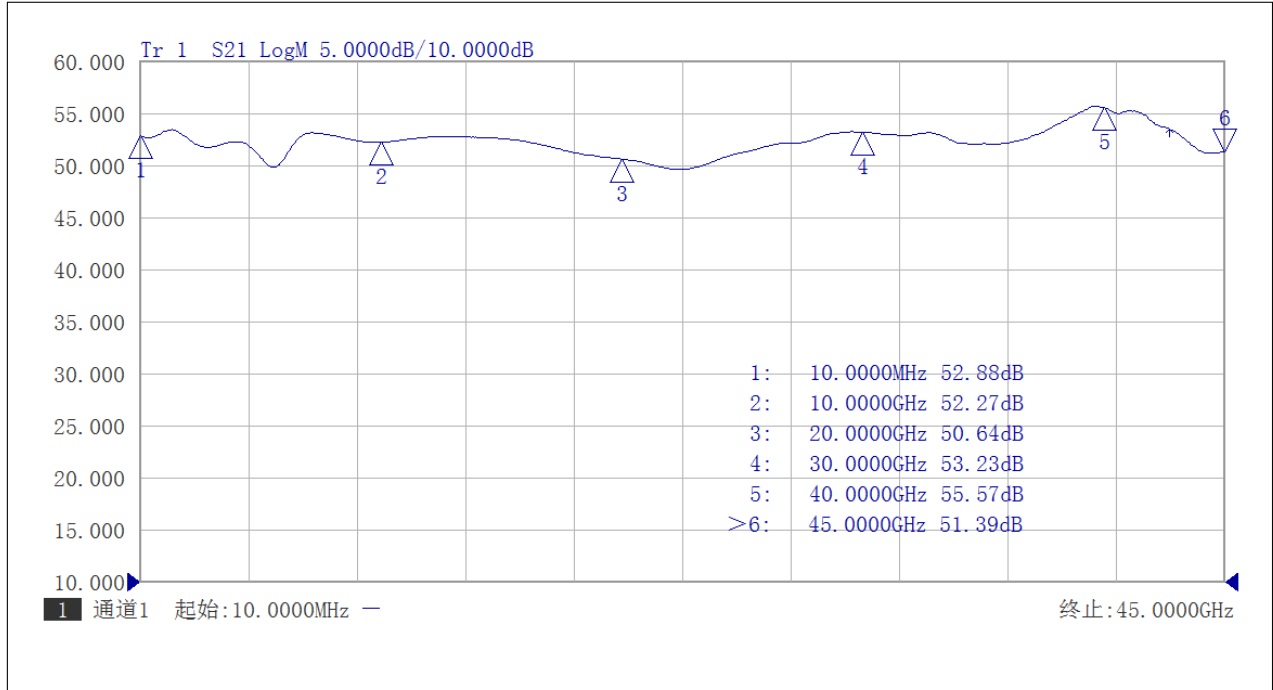
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

Part Number Selection Guide

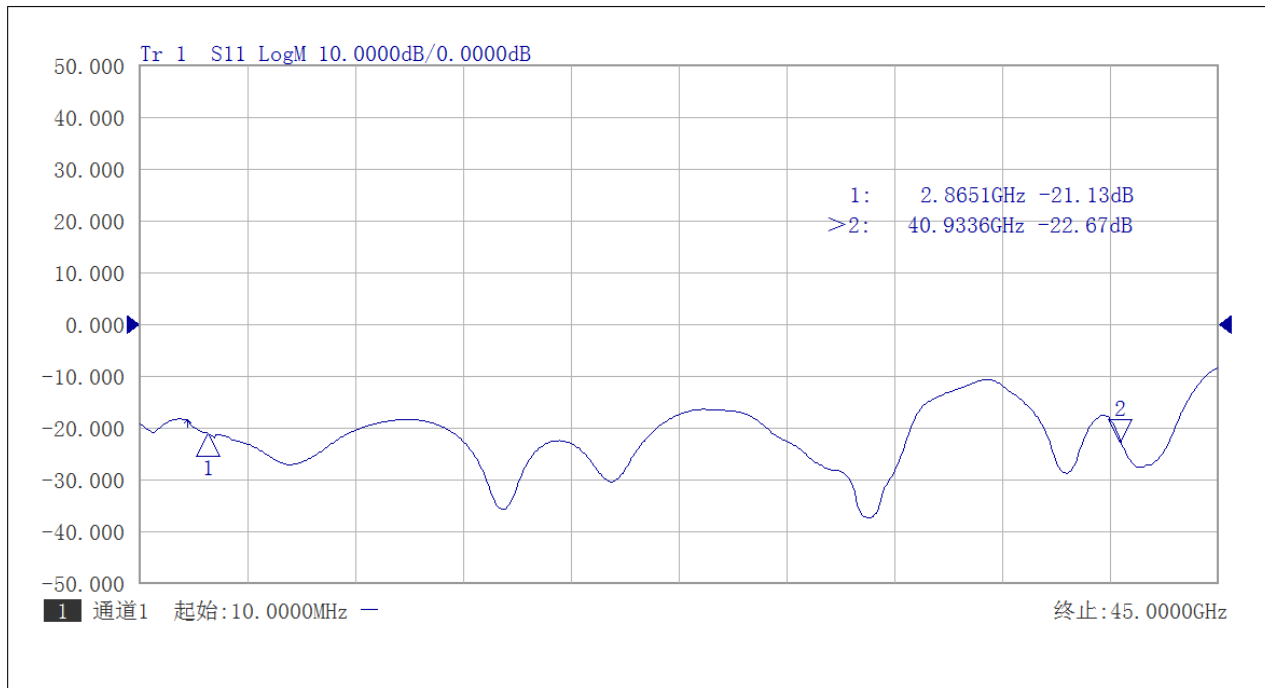
Item	Description
PN	Standard Module with DC Power Supply
PN- LCBT	<u>L</u> ow Cost, <u>C</u> ompact <u>B</u> ench- <u>T</u> op, +220V Supply with AC/DC Adapter



Test Data:

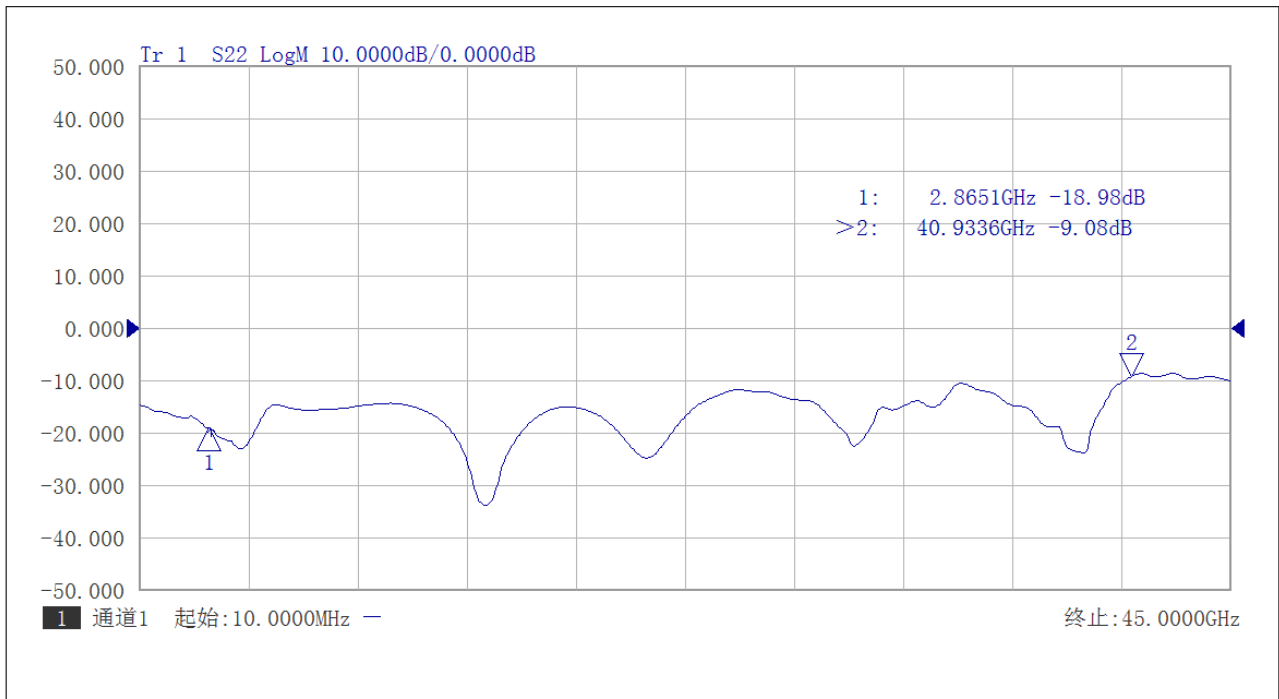


Gain vs Frequency

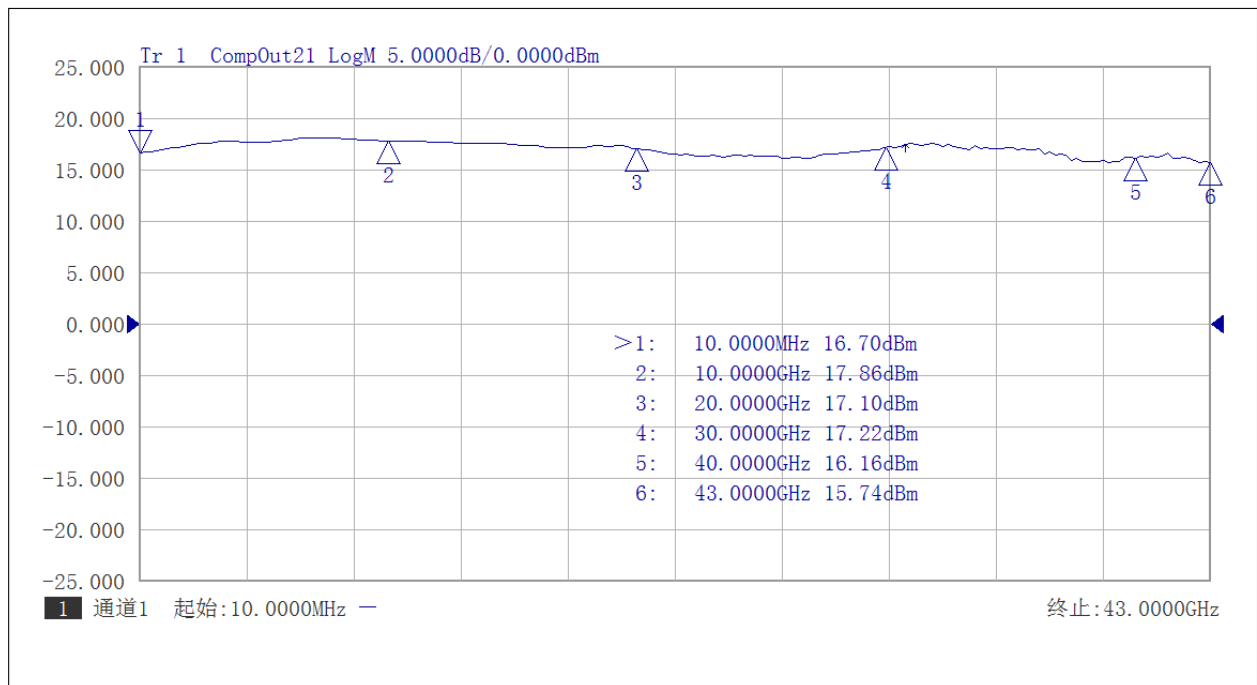


Input Return Loss vs Frequency



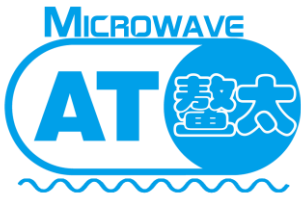


Output Return Loss vs Frequency



P1db vs Frequency





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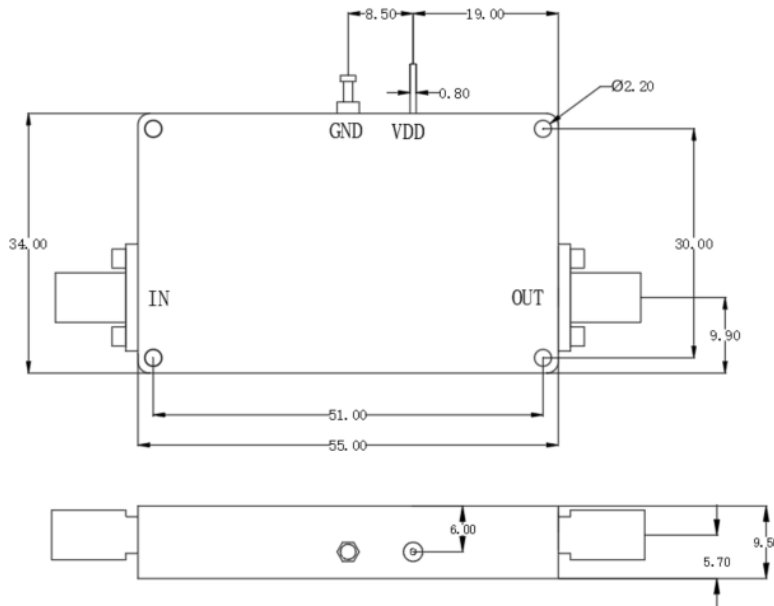
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NF test vs Frequency



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.

Heatsink required if case temp over 50C

