



AT-LNA-0043-2304C

10MHz-43.5GHz Low Noise Amplifier

10MHz-43.5GHz Broadband Low Noise Amplifier

2022-7-1

Product Overview



AT-LNA-0043-2304C broadband low noise amplifier from 10MHz to 43.5GHz. The NF is 4.5dB from 100MHz-40GHz. The DC power requirement is +5V/140mA. The module is with 2.92mm Female. 2.4mm connector is available according to request.

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.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 10MHz-43.5GHz
- ✓ Small signal gain: 23dB
- ✓ Noise Figure 4.5dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-43.5GHz	
Gain	23dB	25dB	
Gain Flatness(0.1-40GHz)		+/-2dB	
NF(1-40GHz)		4.5dB	6.5dB
P1dB		+13dBm	
Psat		+15dBm	
Drain Supply		+5V	+8V
Current		140 mA	210mA
Input Return Loss	-5	-10 dB	
Output Return Loss	-5	-10 dB	
Spec Temp		25C	





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Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Package Sealing	Epoxy Sealed
Finish	Gold Plated
Weight	50g
Size:	30x30x14 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+15dBm
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.

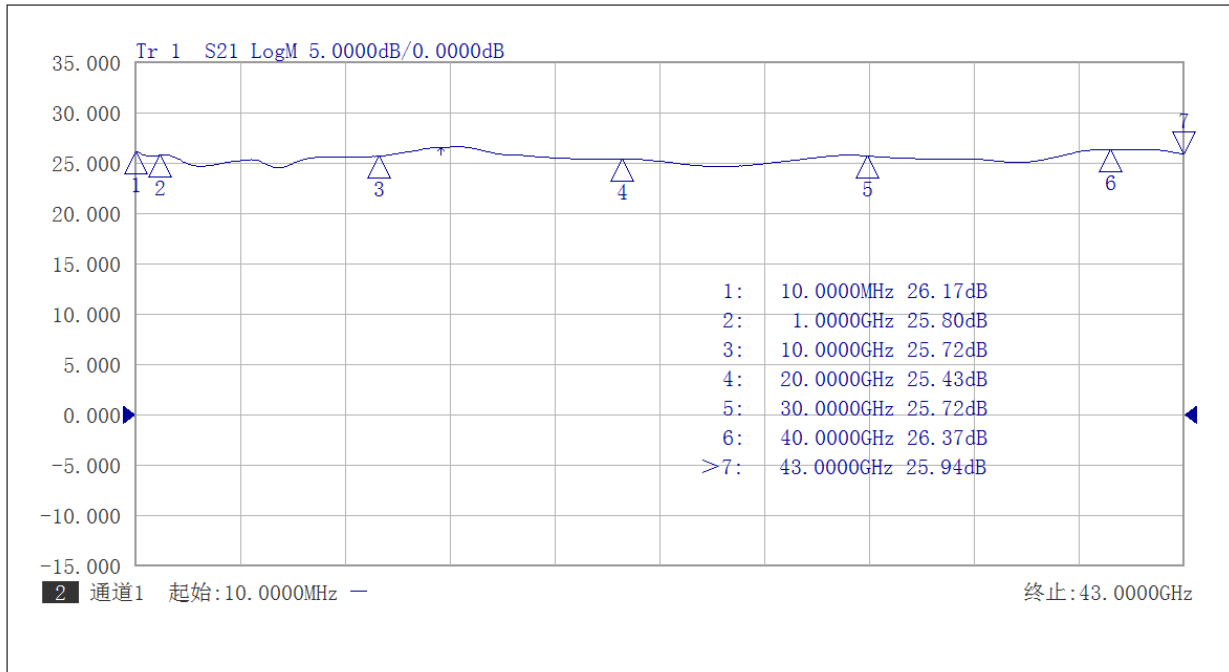
Part Number Selection Guide

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

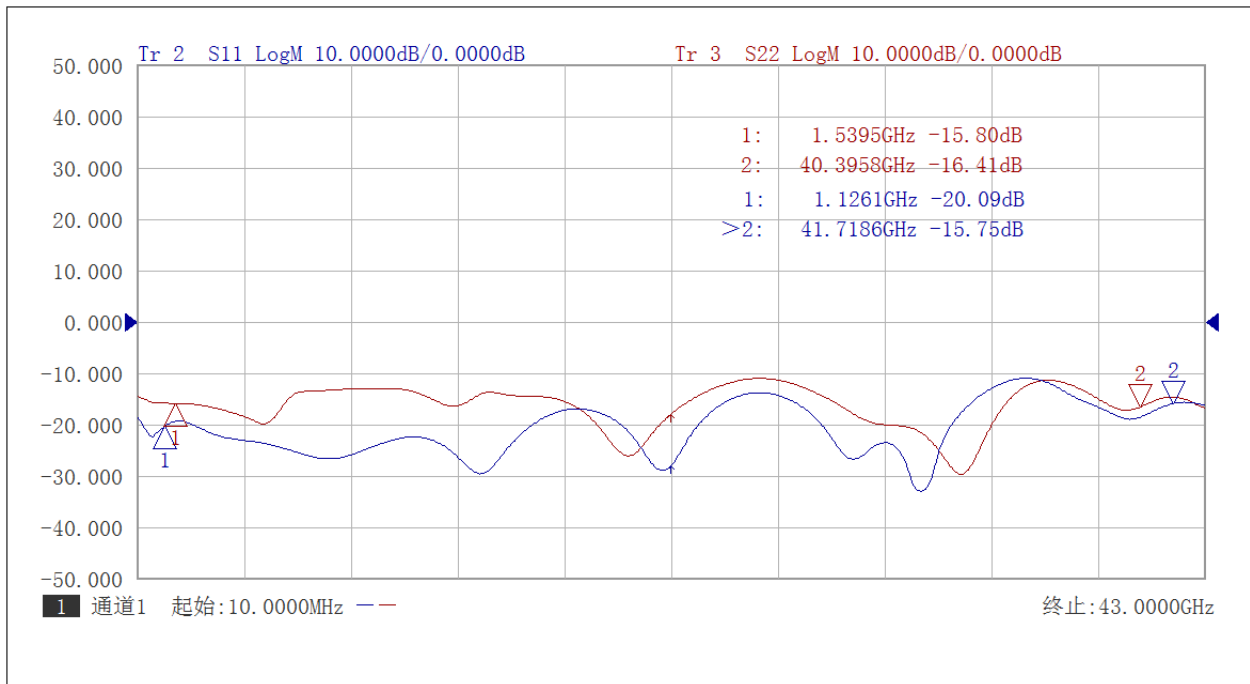


Test Data (25C)

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

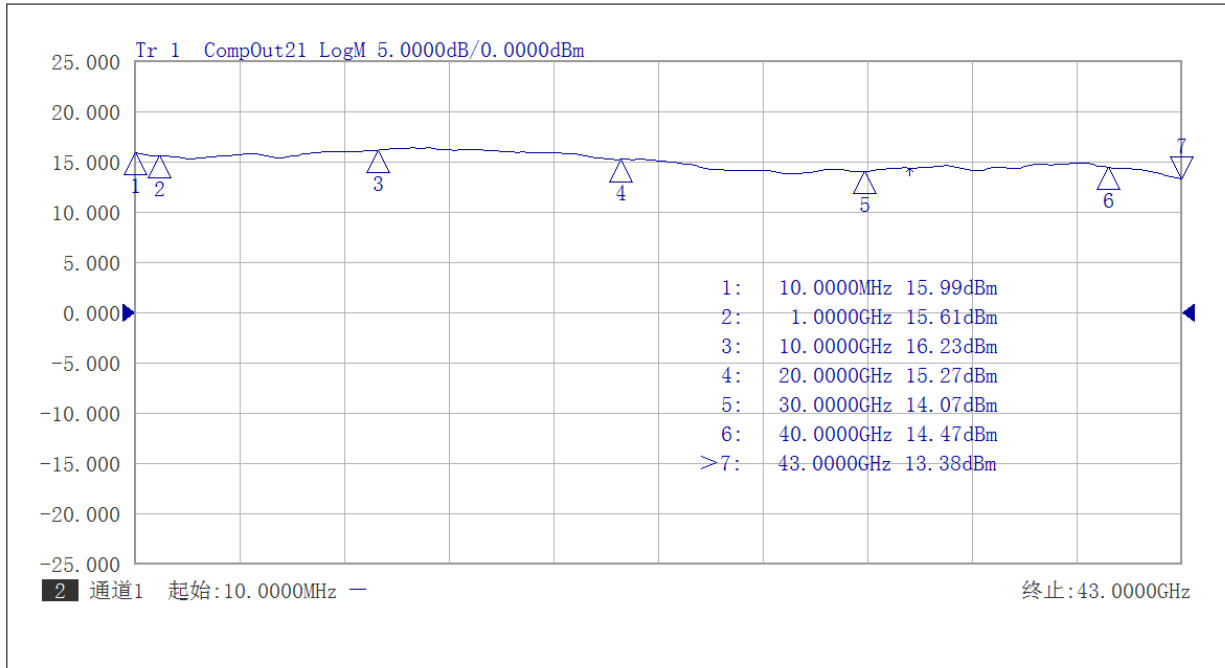


Gain vs Frequency from 10MHz-43GHz

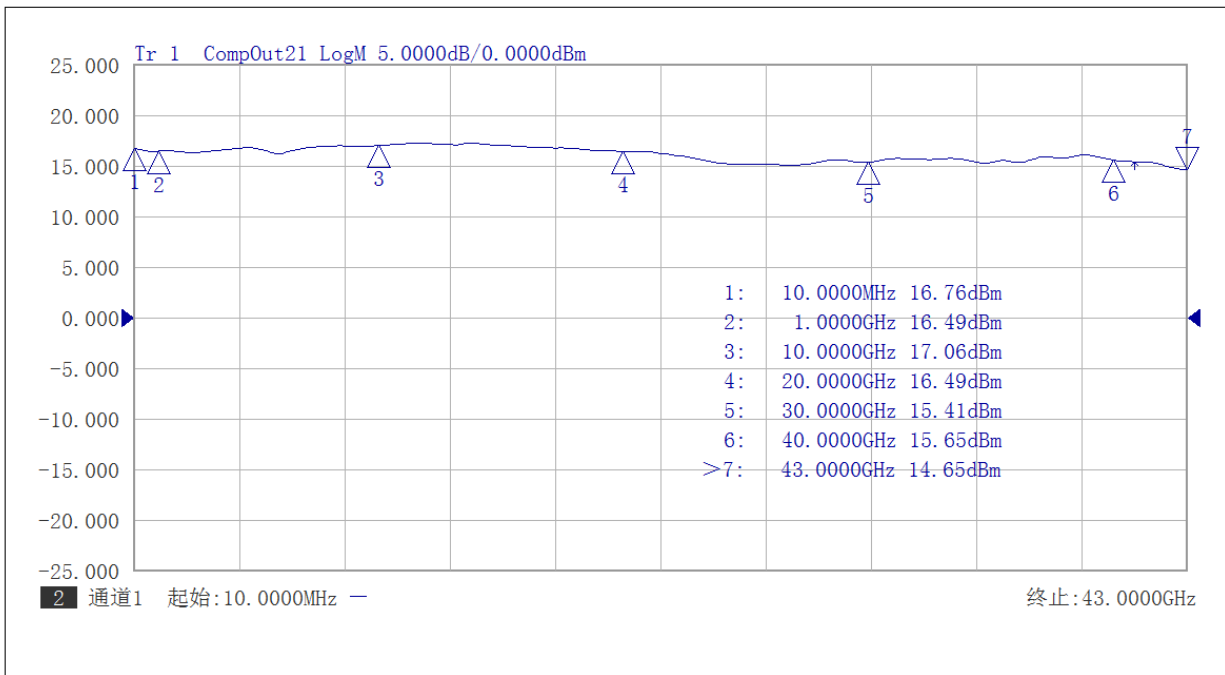


Return Loss vs Frequency





P1db Test vs Frequency



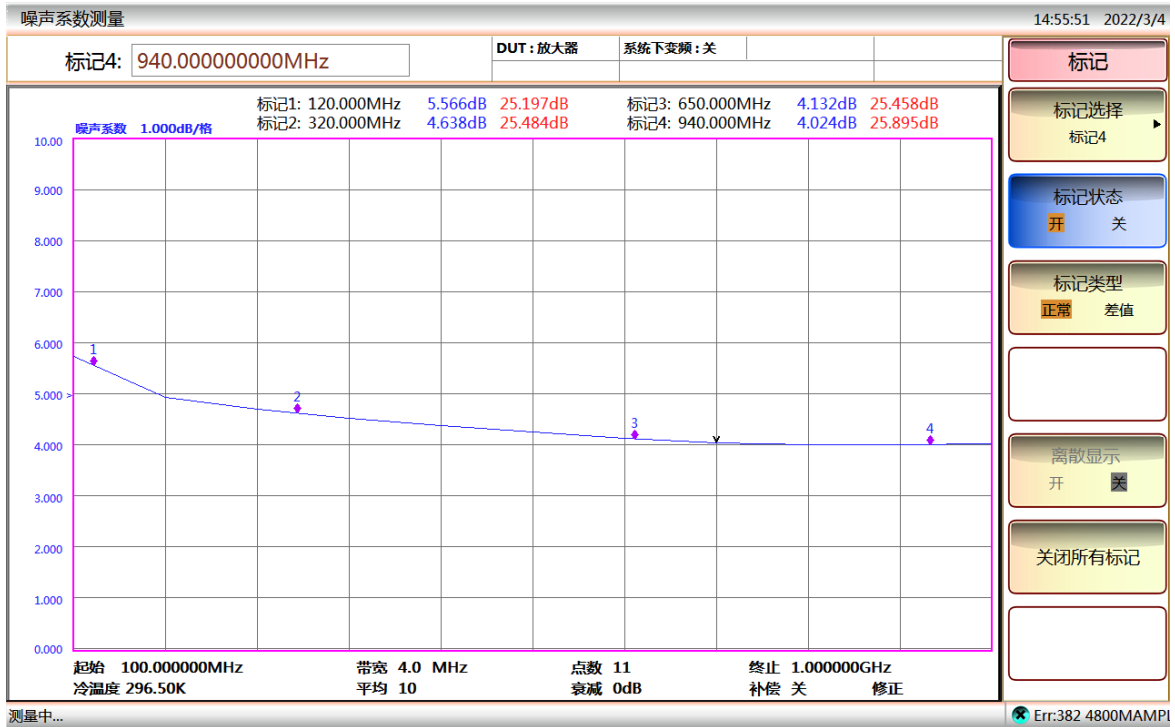
P3db Test vs Frequency



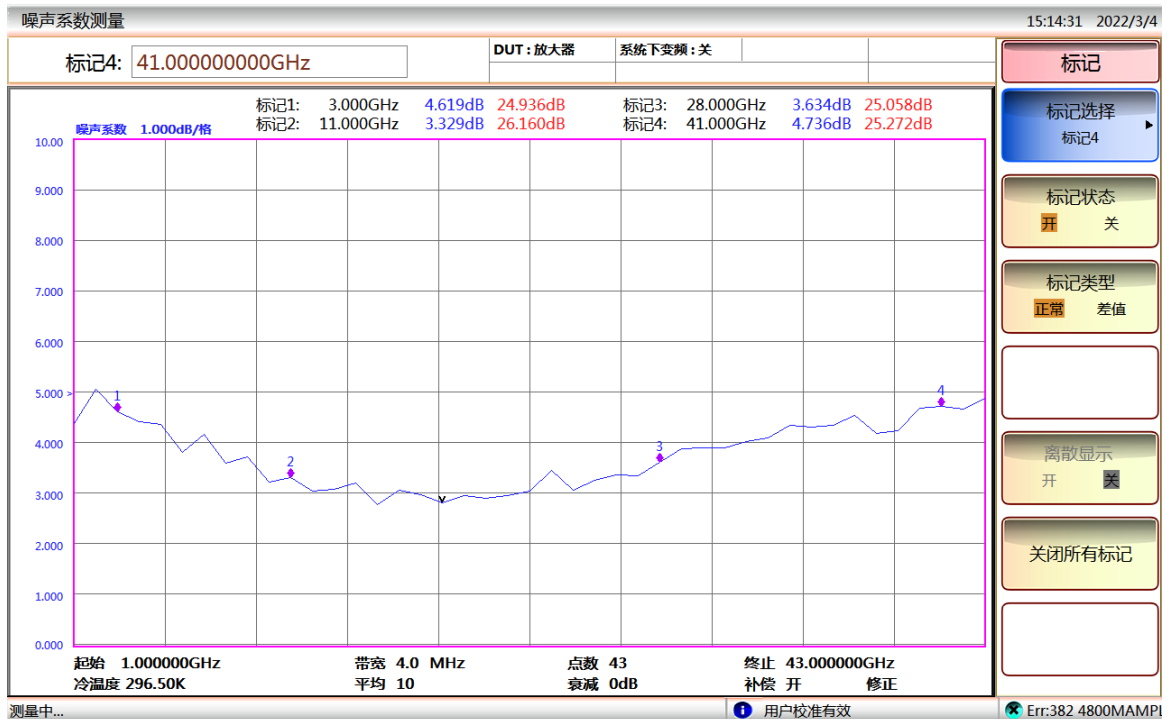


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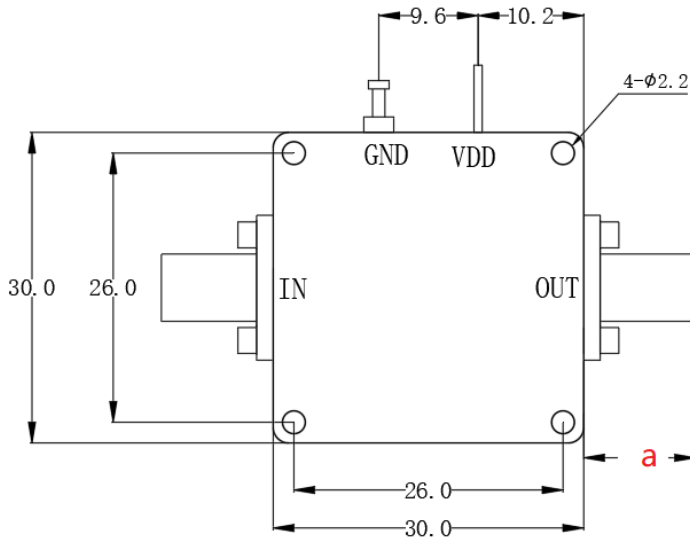
NF test 100MHz to 1GHz



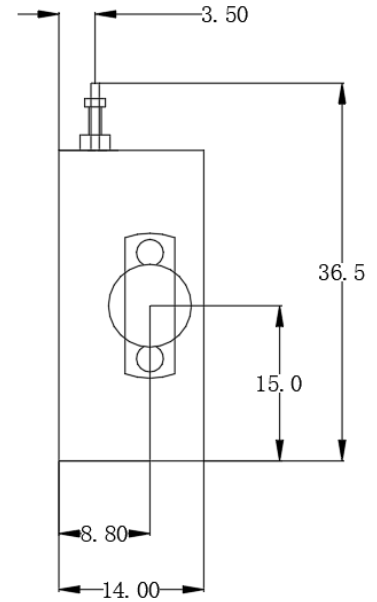
NF Test from 1GHz to 43GHz



Dimension: (unit in mm)



In millimetres



	<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.

