

10MHz-40GHz Broadband Low Noise Amplifier



Product Overview

AT-LNA-0040-2504HP broadband low noise amplifier from 10MHz to 40GHz. The NF is 4dB from 100MHz-40GHz. The DC power requirement is +8V/350mA. 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-40GHz
- ✓ Small signal gain: 25dB
- ✓ Noise Figure 4dB
- ✓ Pout=+22dBm

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-40GHz	
Gain	23dB	25dB	
Gain Flatness		+/-1.5dB	+/-3dB
NF(0.1-40GHz)		4dB	6
P1dB		+20dBm	
Psat		+22dBm	
Drain Supply	+7.5V	+8V	+12V
Current		350 mA	
Input Return Loss		-10 dB	
Output Return Loss		-10 dB	
Spec Temp		25C	





AT-LNA-0040-2504HP

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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 (Without Heatsink)	50g
Size:	30x30x14 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+10dBm
Operating Temperature(note)	-20 to +70C
Storage Temperature	-65 to +150C

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

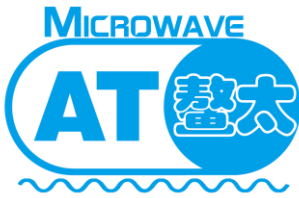
Caution:

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:

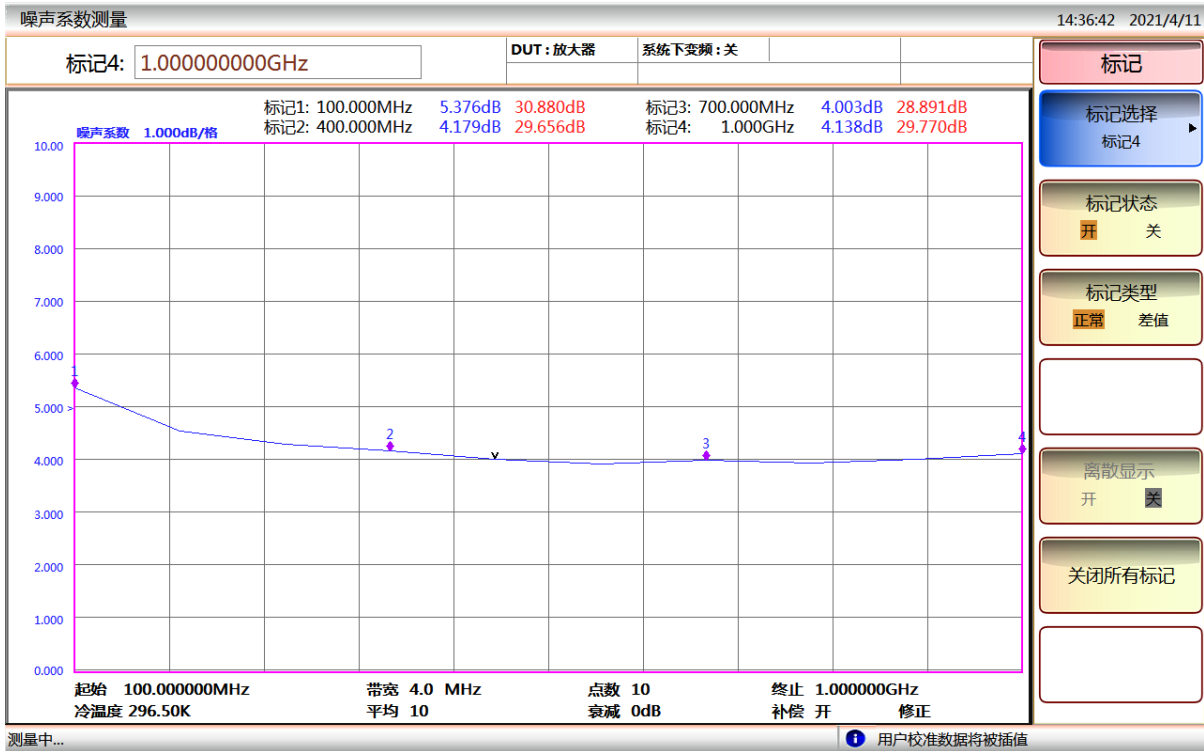
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



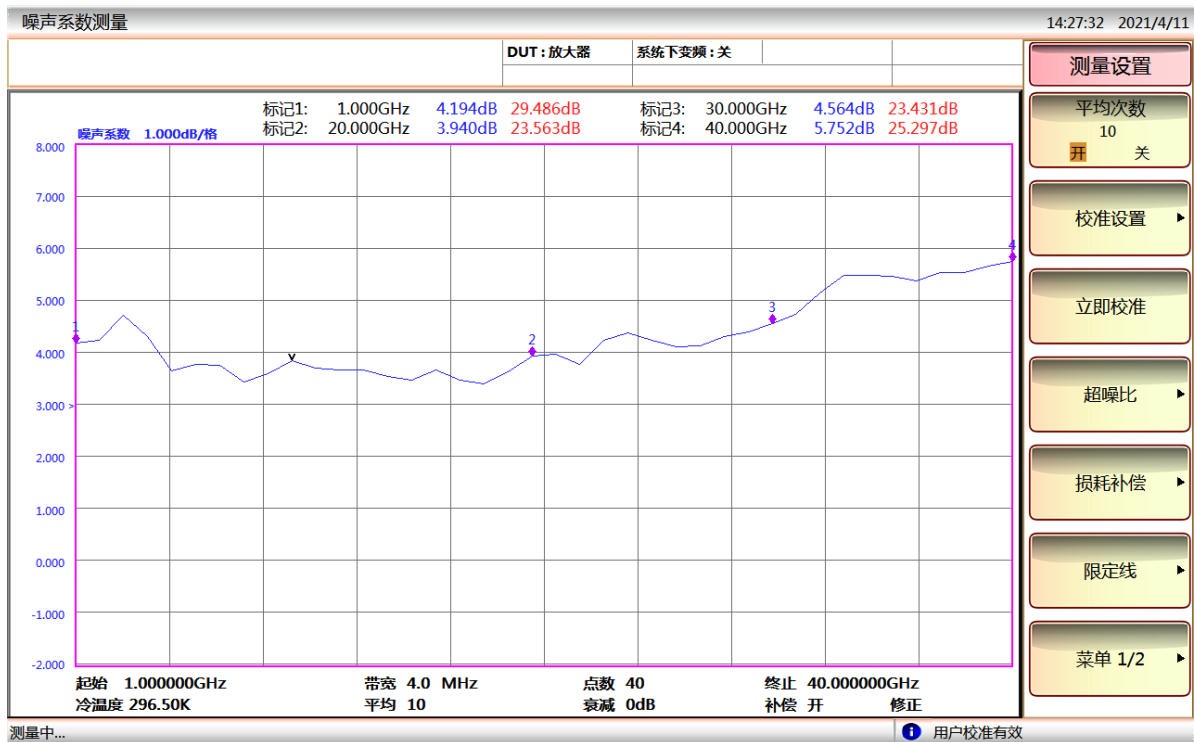


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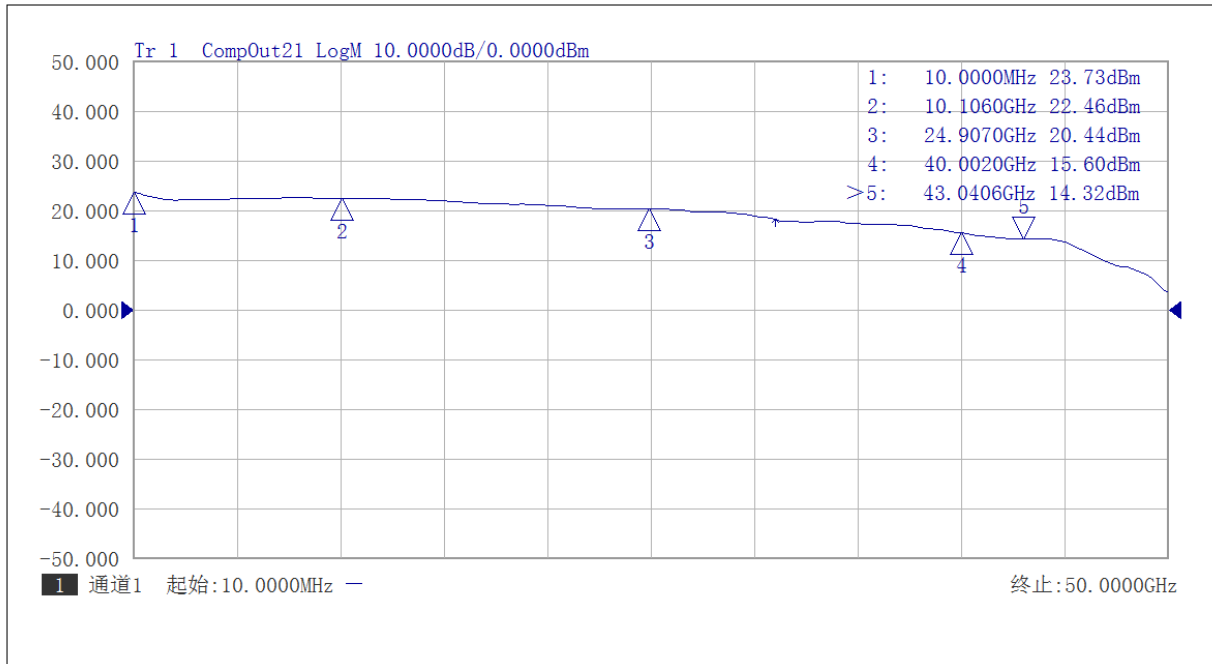


NF test 100MHz to 1GHz

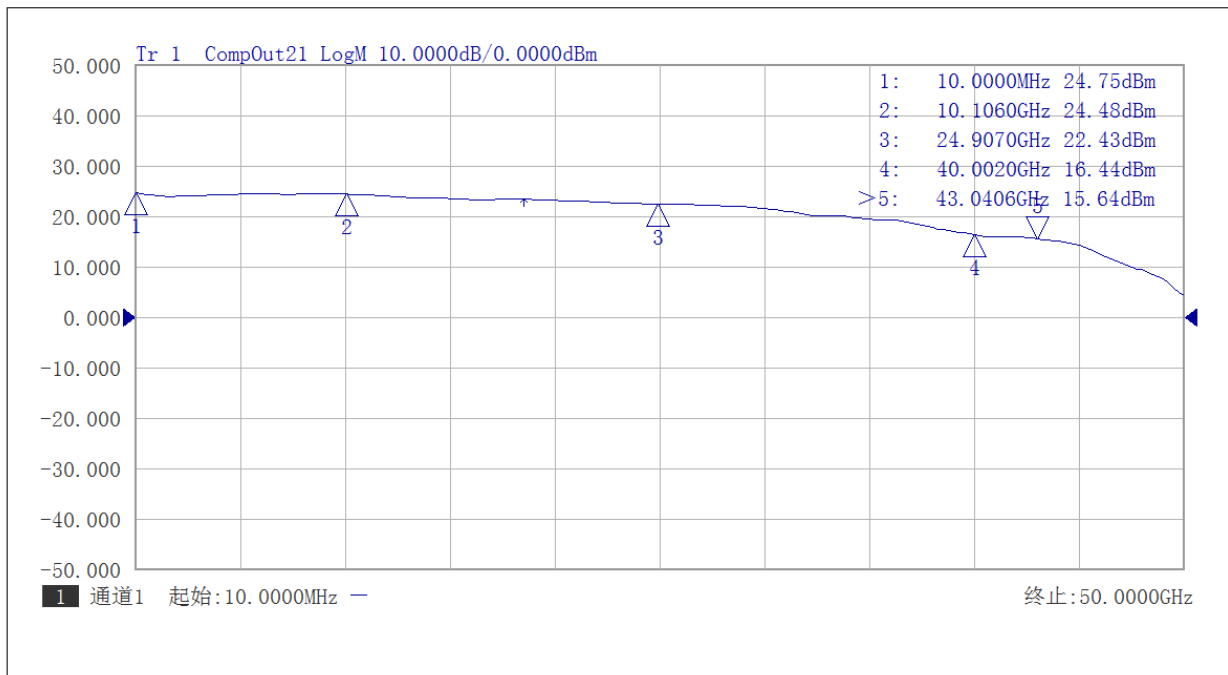


NF Test from 1GHz to 40GHz





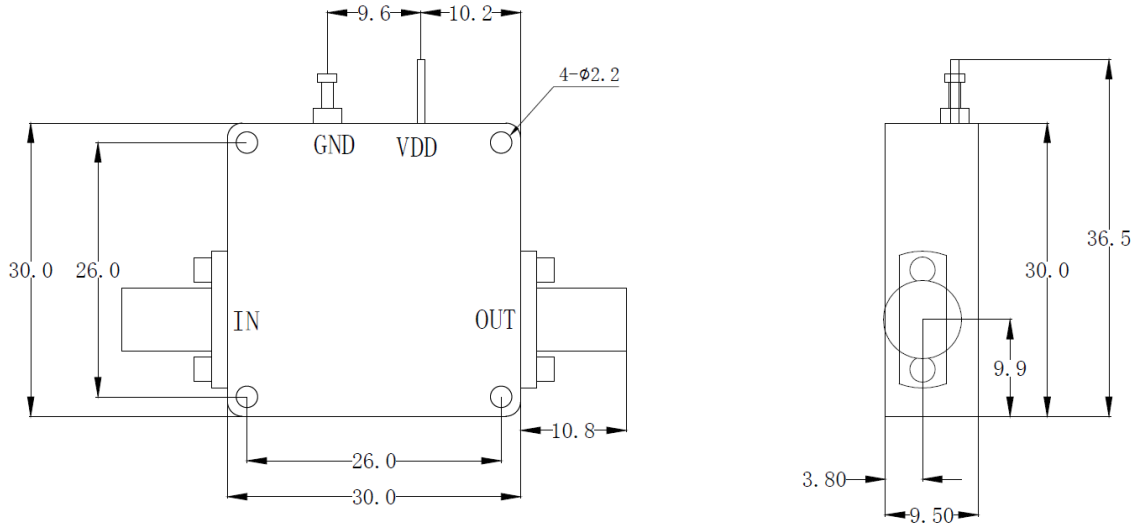
P1dB vs Frequency



P3dB vs Frequency

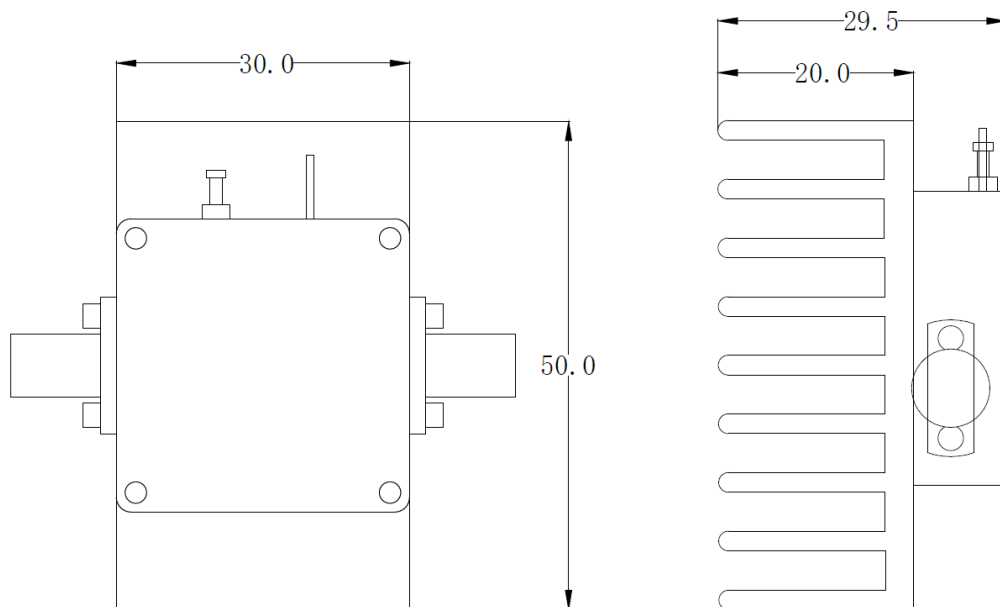


Dimension: (unit in mm)



	<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.



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.

