

17-43GHz Low Noise Amplifier



Product Overview

AT-LNA-1743-4303T is high gain low noise amplifier with 43dB gain in the frequency of 17-43GHz. The DC power requirement is +5V/160mA. The module is with 2.92mm Female 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.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 17-43GHz
- ✓ Small signal gain: 43dB
- ✓ NF=3dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		17-43GHz	
Gain	40	43 dB	
Gain Flatness		+/-5dB	
NF		3dB	4Db
P1Db		+12dBm	
Psat		+13dBm	
Drain Supply		+5V	+8V
Current		160 mA	
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
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight	80g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+0 dBm
Operating Temperature(note)	-20 to + 70C
Storage Temperature	-65 to +150C

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

Caution:

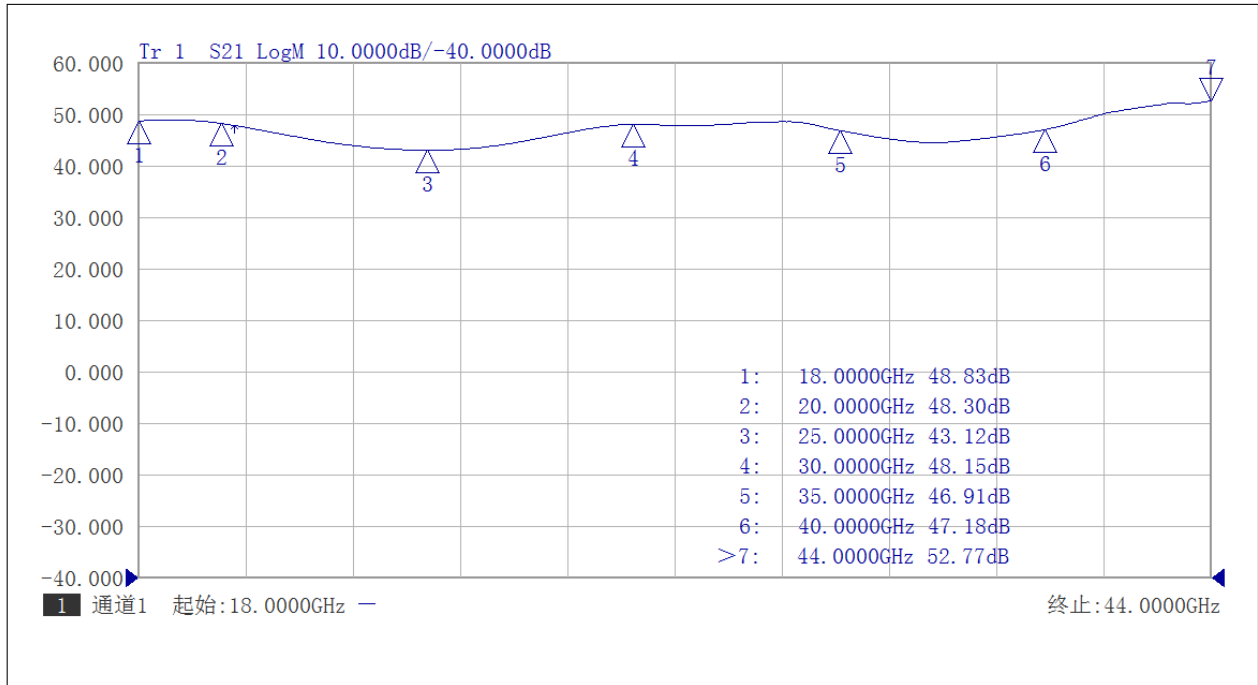
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

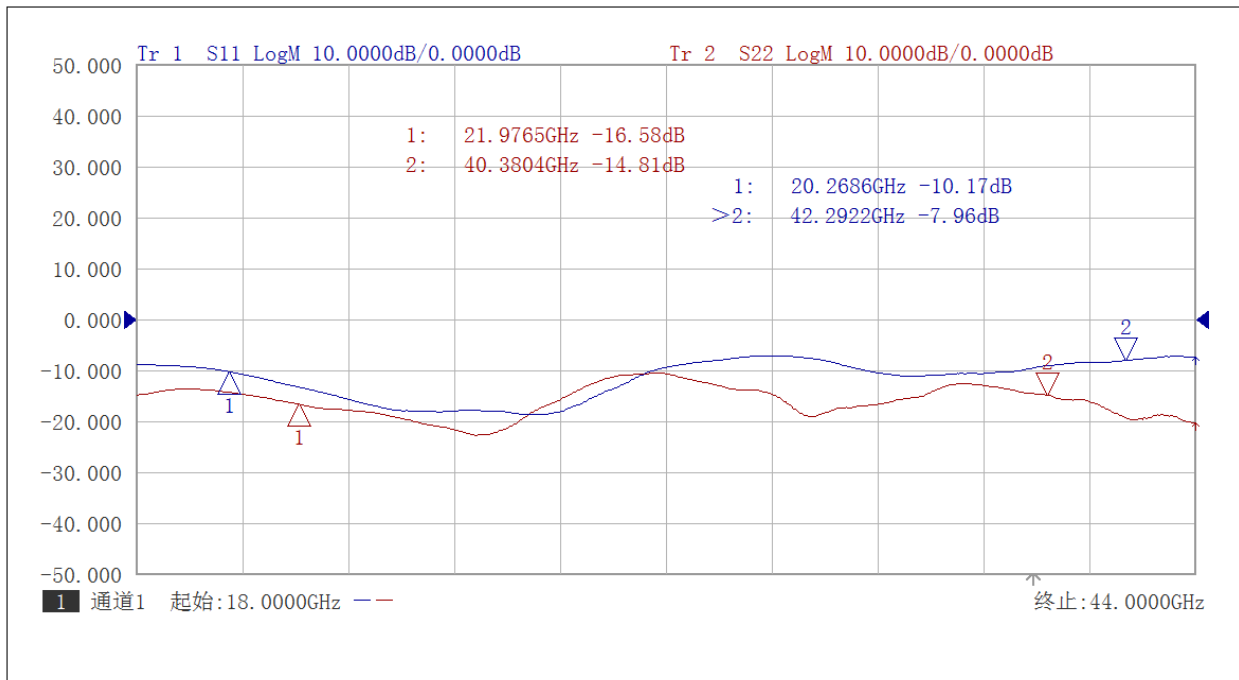
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data

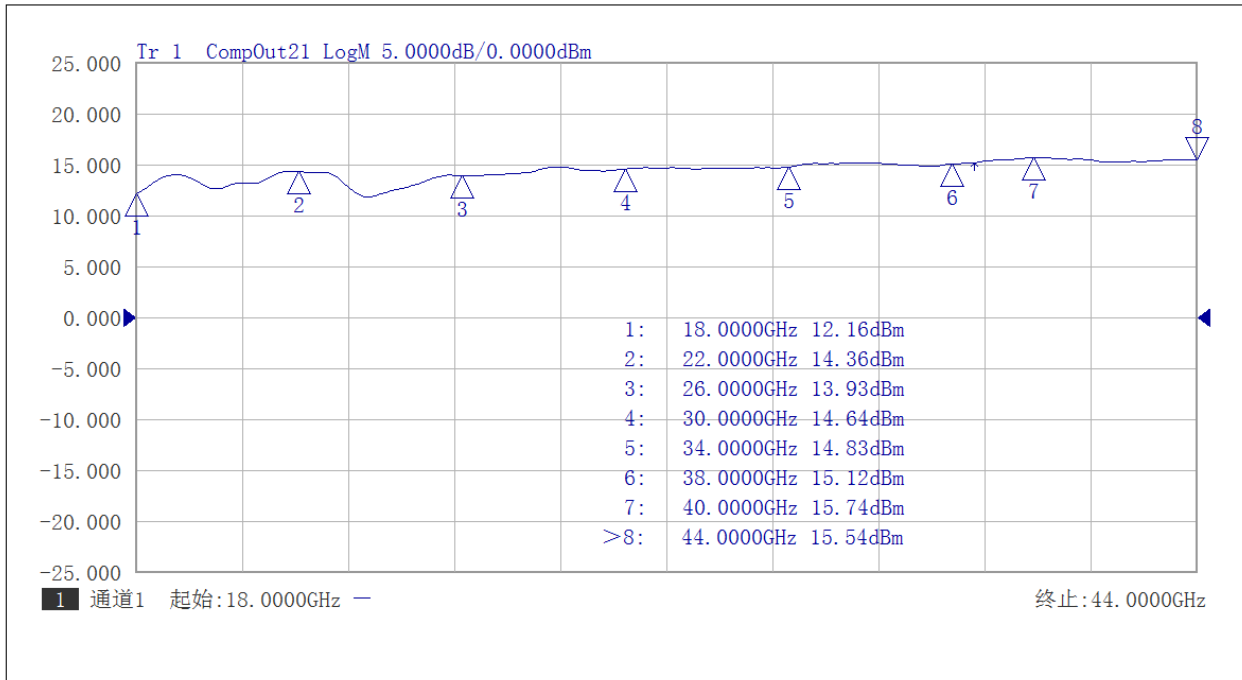


Gain vs Frequency

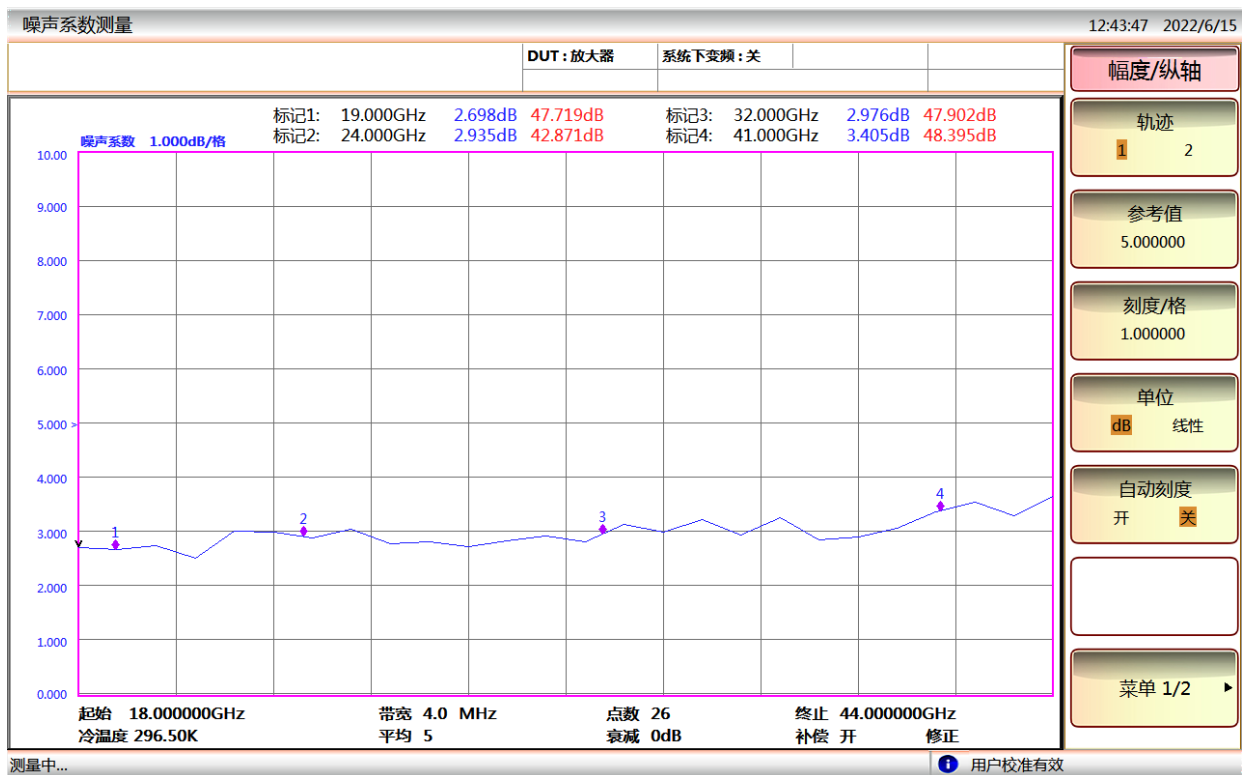


Return Loss vs Frequency





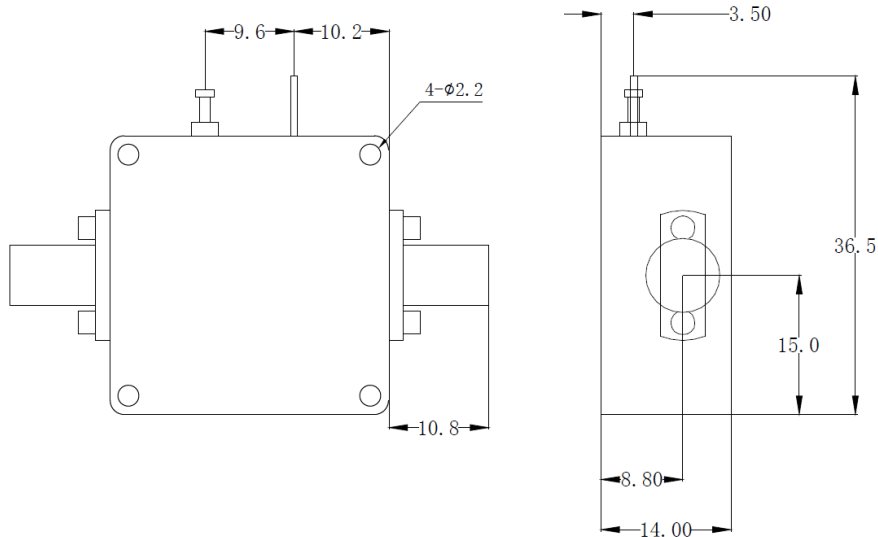
P1db vs Frequency



NF vs Frequency

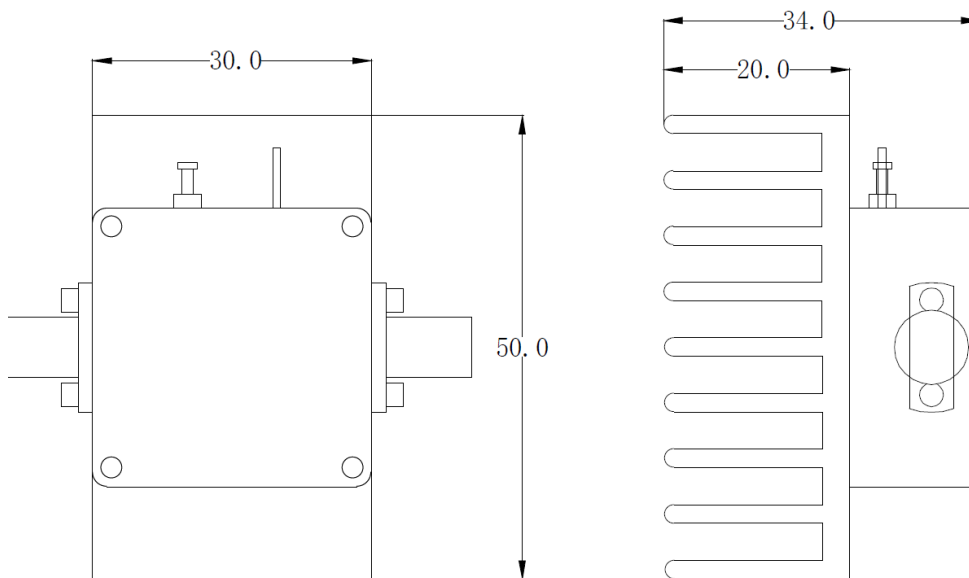


Dimension: (unit in mm)



	<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

