

100MHz-18GHz Low Noise Amplifier 2021-8-30



Product Overview

AT-LNA-0018-3825H is high gain low noise amplifier with 40dB gain in the frequency of 100MHz-18GHz. The DC power requirement is +5V/130mA. The module is with SMA 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 +40dBm, and connectors from SMA to 1.85mm. If you don't find what you need, just send us email sales@atmicrowave.com

Advantages

- ✓ Frequency: 100MHz-18GHz
- ✓ Small signal gain: 38dB
- ✓ NF=2.5dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		100MHz-18GHz	
Gain	36	38 dB	
NF		2.5	3.2
P1dB		+10dBm	
Psat		+12dBm	
Drain Supply		+5V	+8V
Current		130 mA	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-LNA-0018-3825H

100MHz-18GHz Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	55g
Size:	30X30X14 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+15 dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

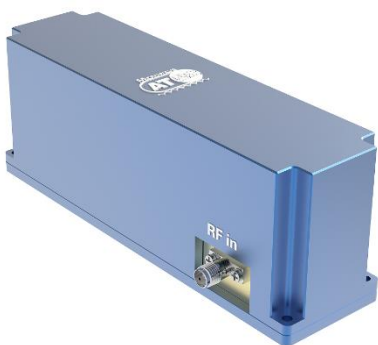
Note: -40 to +85C is available according to request.

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.

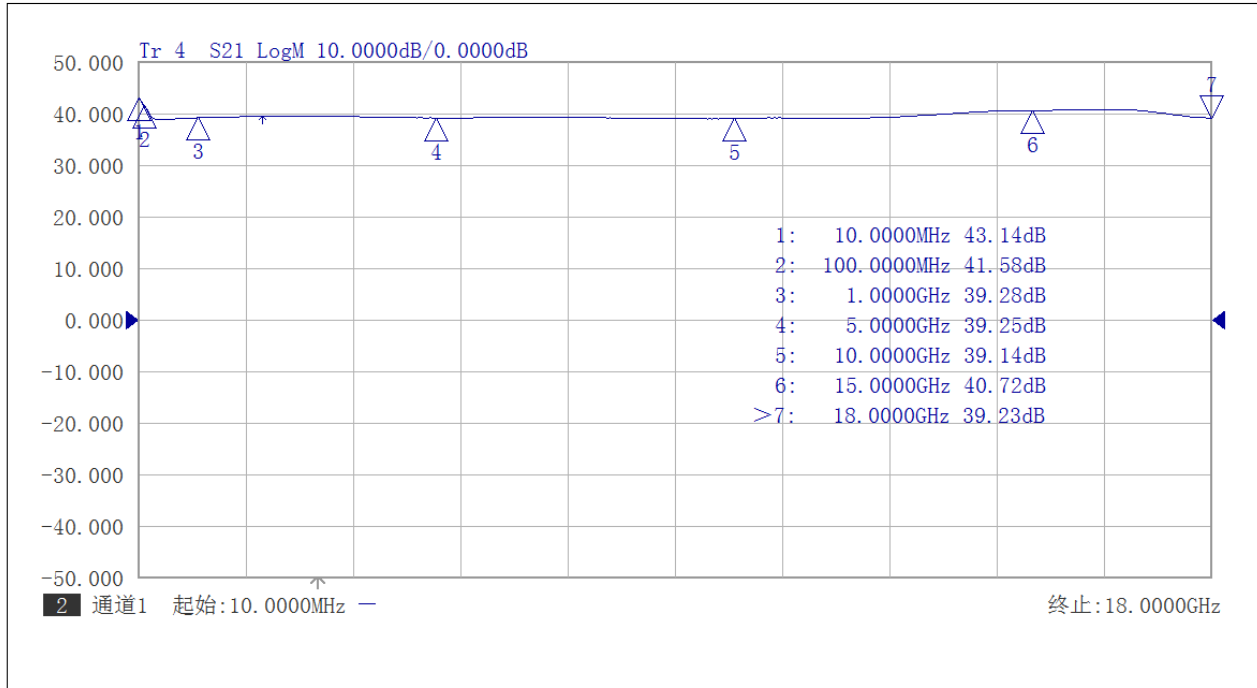
Part Number Selection Guide

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

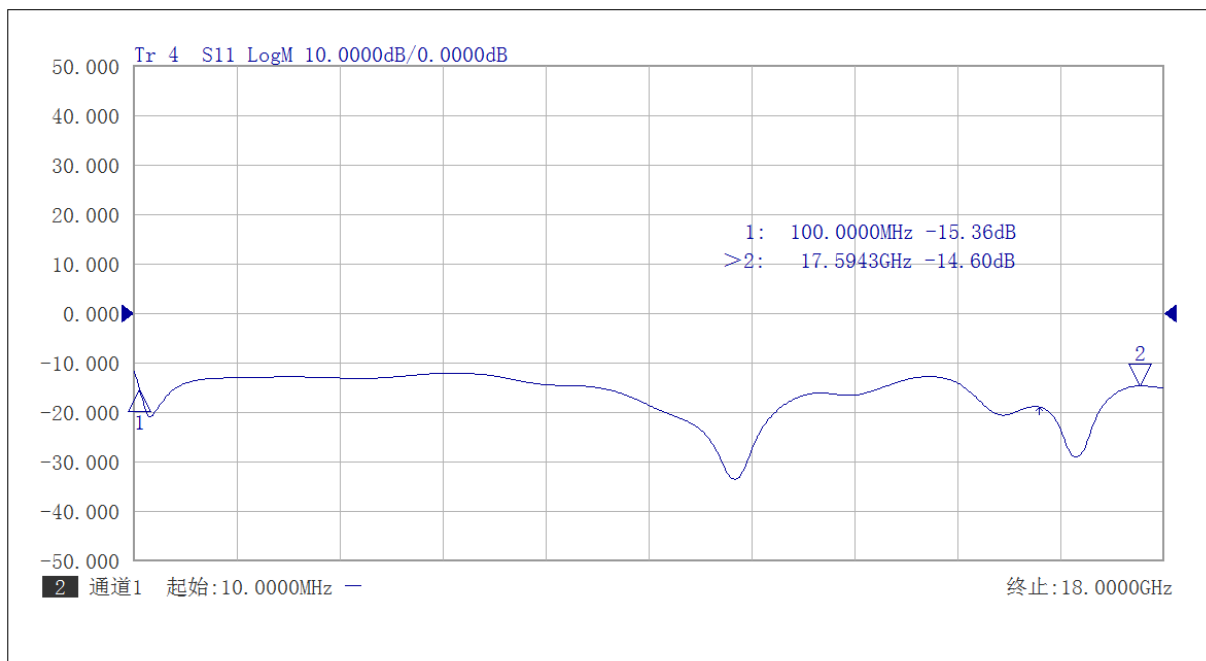


Test Data (25C)

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

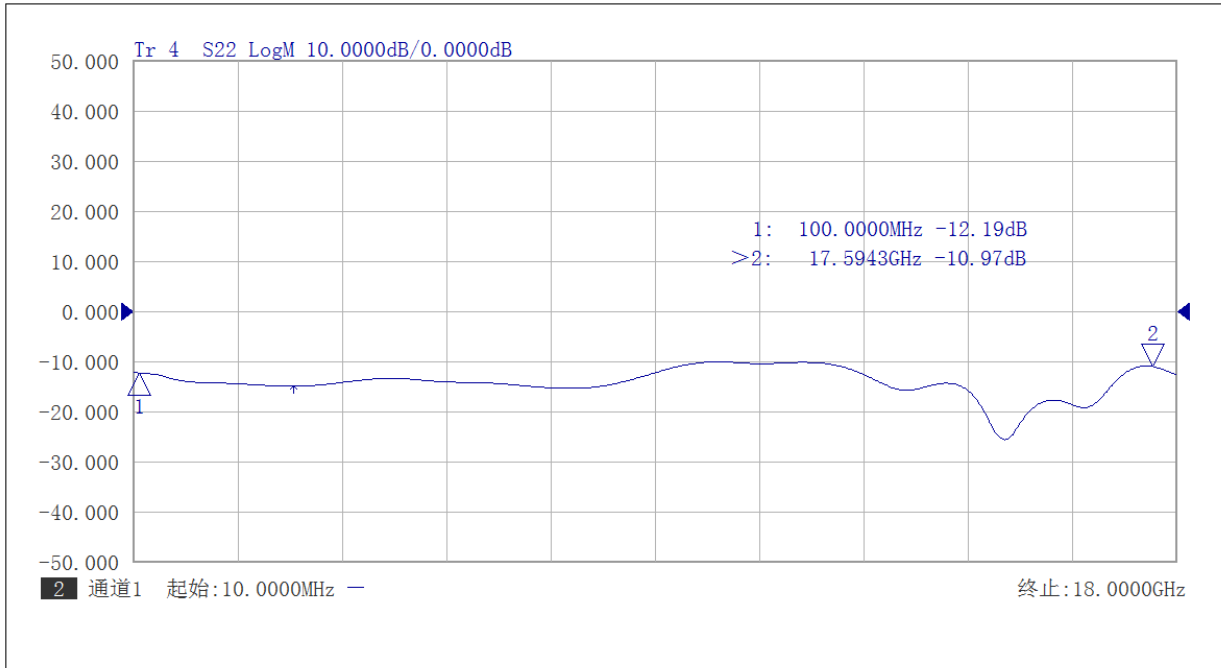


Gain vs Frequency



Input Return Loss





Output Return Loss vs Frequency



NF vs Frequency 1-20GHz



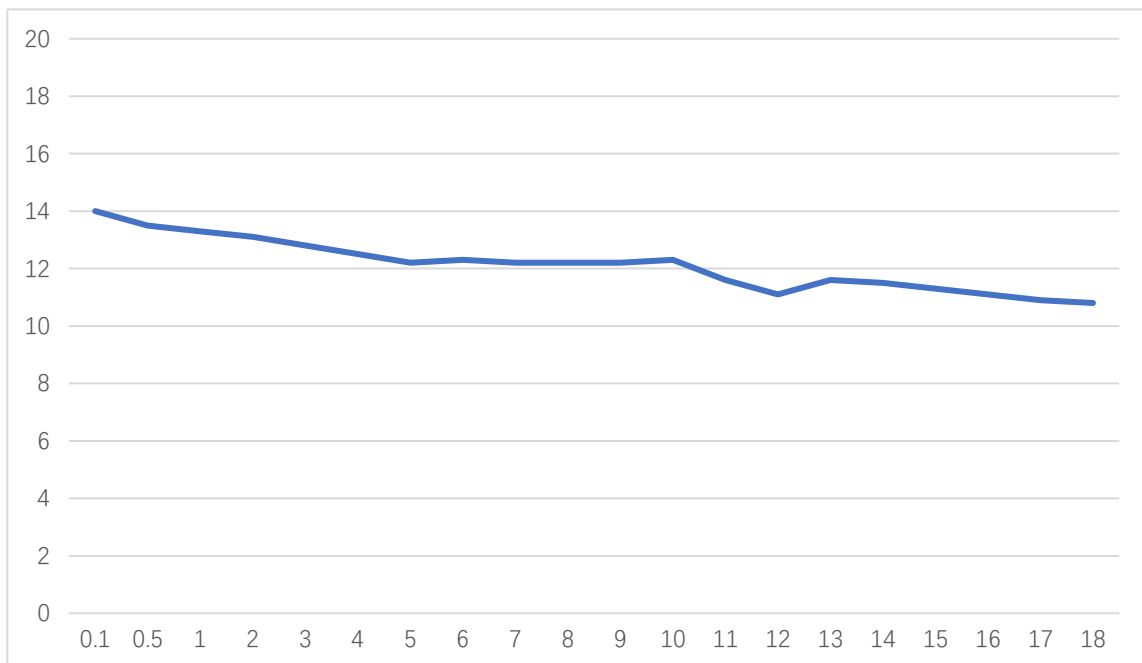


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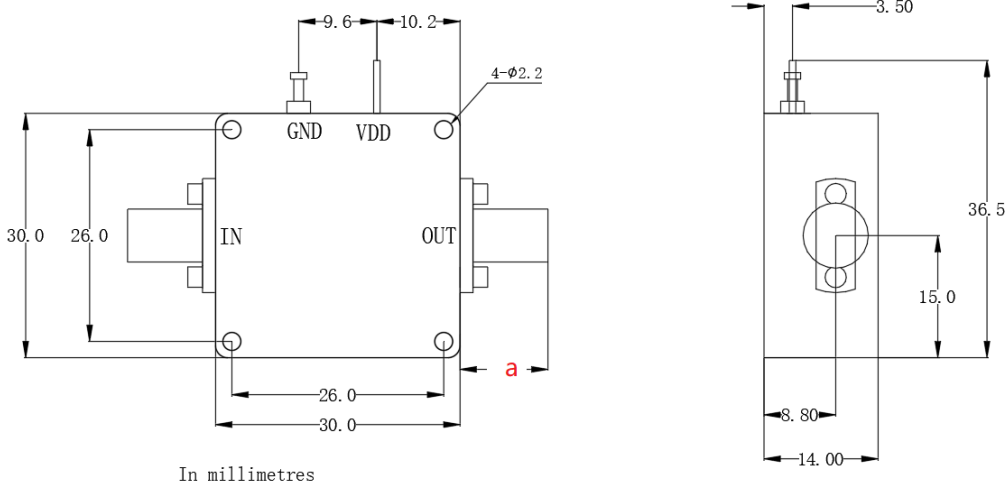
NF test vs 100MHz-1GHz



Psat vs Frequency



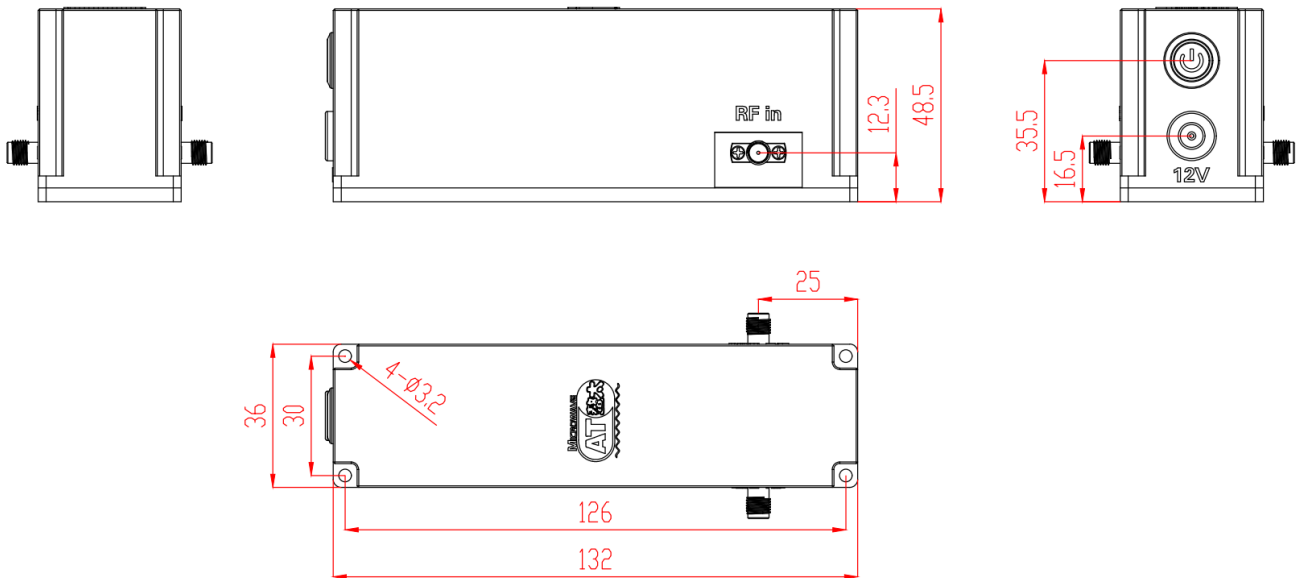
Dimension: (unit in mm)



	<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.

Heatsink required is case temp over 50C



PN-LCBT Outline

