

18-40GHz Low Noise Amplifier



Product Overview

AT-LNA-1840-4035X is high gain low noise amplifier with 40dB gain in the frequency of 18-40GHz. The DC power requirement is +5V/380mA. The module is with 2.92mm 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. If you don't find what you need, just send us email sales@atmicrowave.com

Advantages

- ✓ Frequency: 18-40GHz
- ✓ Small signal gain: 40dB
- ✓ NF=3.5dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		18-40GHz	
Gain	37dB	40dB	
Gain Flatness		+/-2.0dB	+/-3dB
NF		3.5	5.5
P1dB		+18dBm	
Psat		+20dBm	
Drain Supply		+5V to +8V	
Idd NO RF		0.38A	
IDD at Psat		0.42A	0.5A
Input Return Loss		-10dB	
Output Return Loss		-8dB	
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:	45x34x9.5 mm

Absolute Maximum Ratings Table

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

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

Notes:

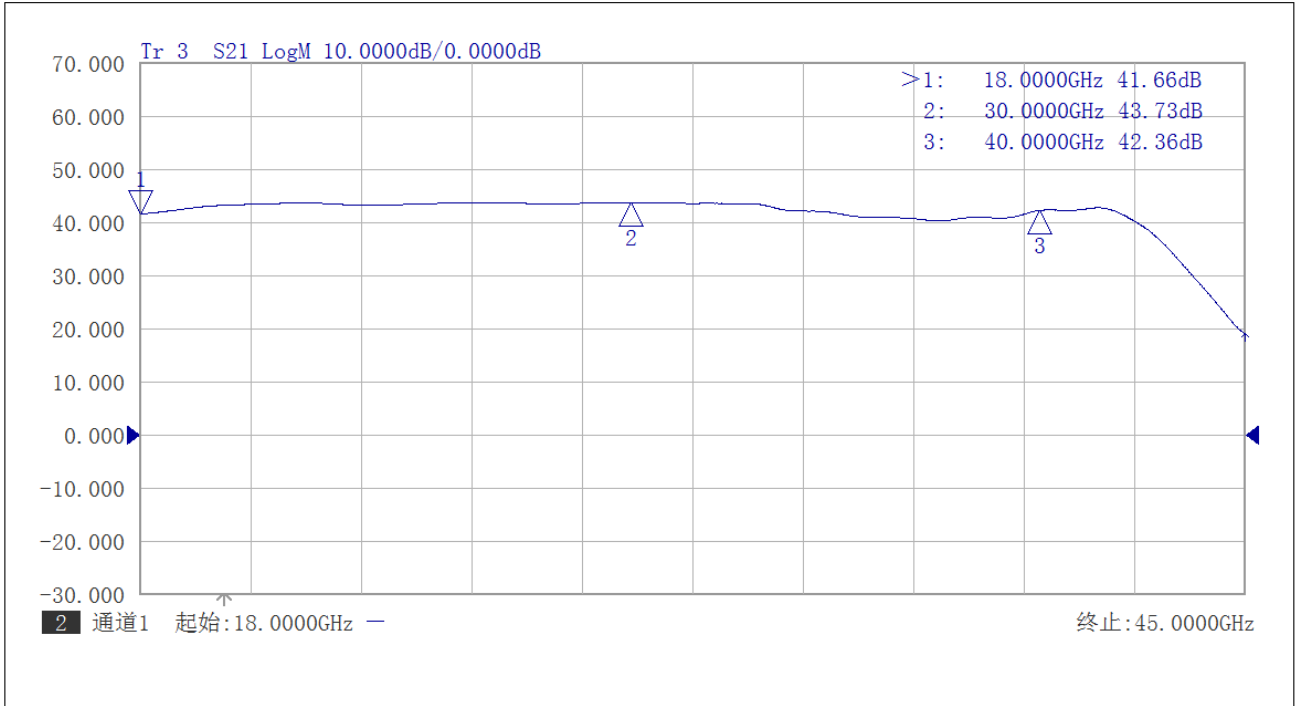
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

Part Number Selection Guide

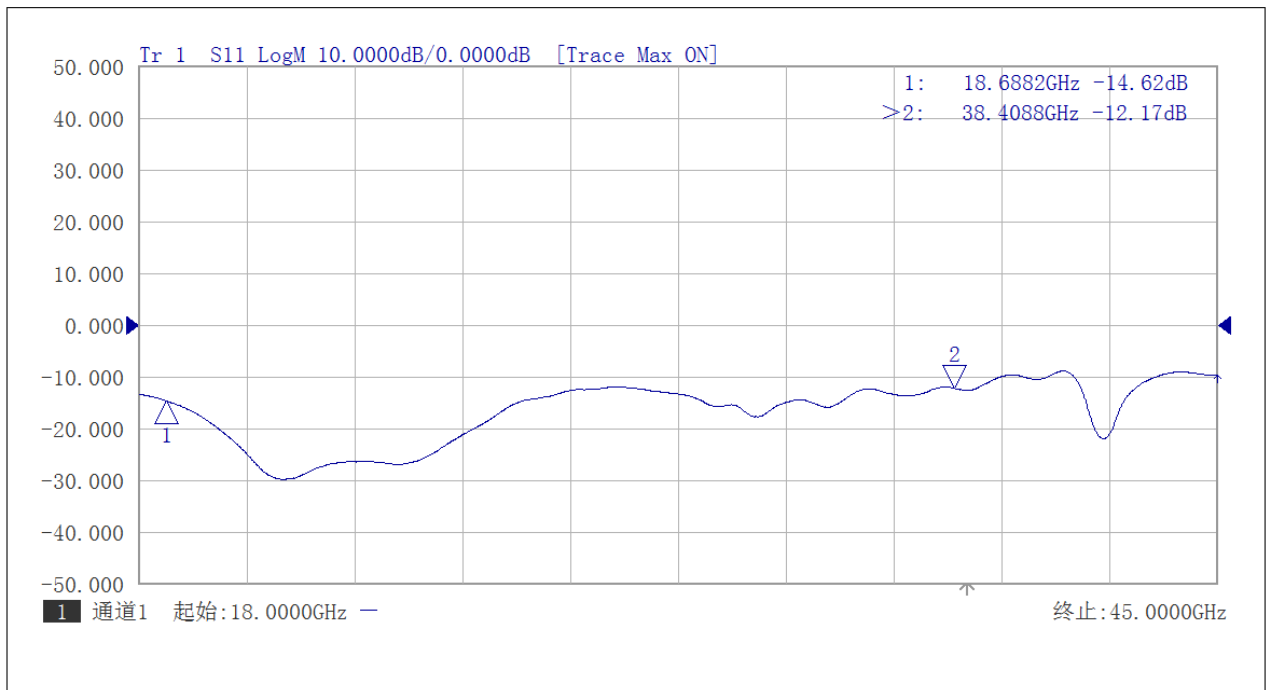
Item	Description
PN	Standard Module with DC Power Supply
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter



Test Data:

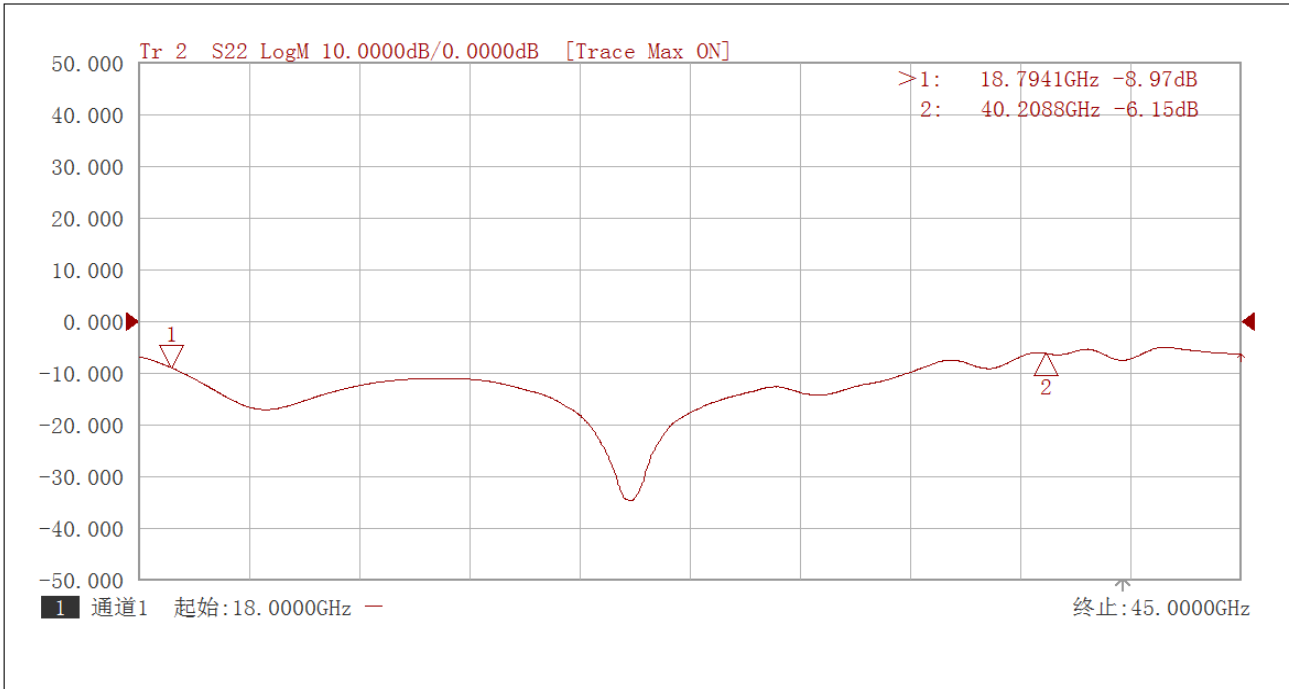


Gain vs Frequency

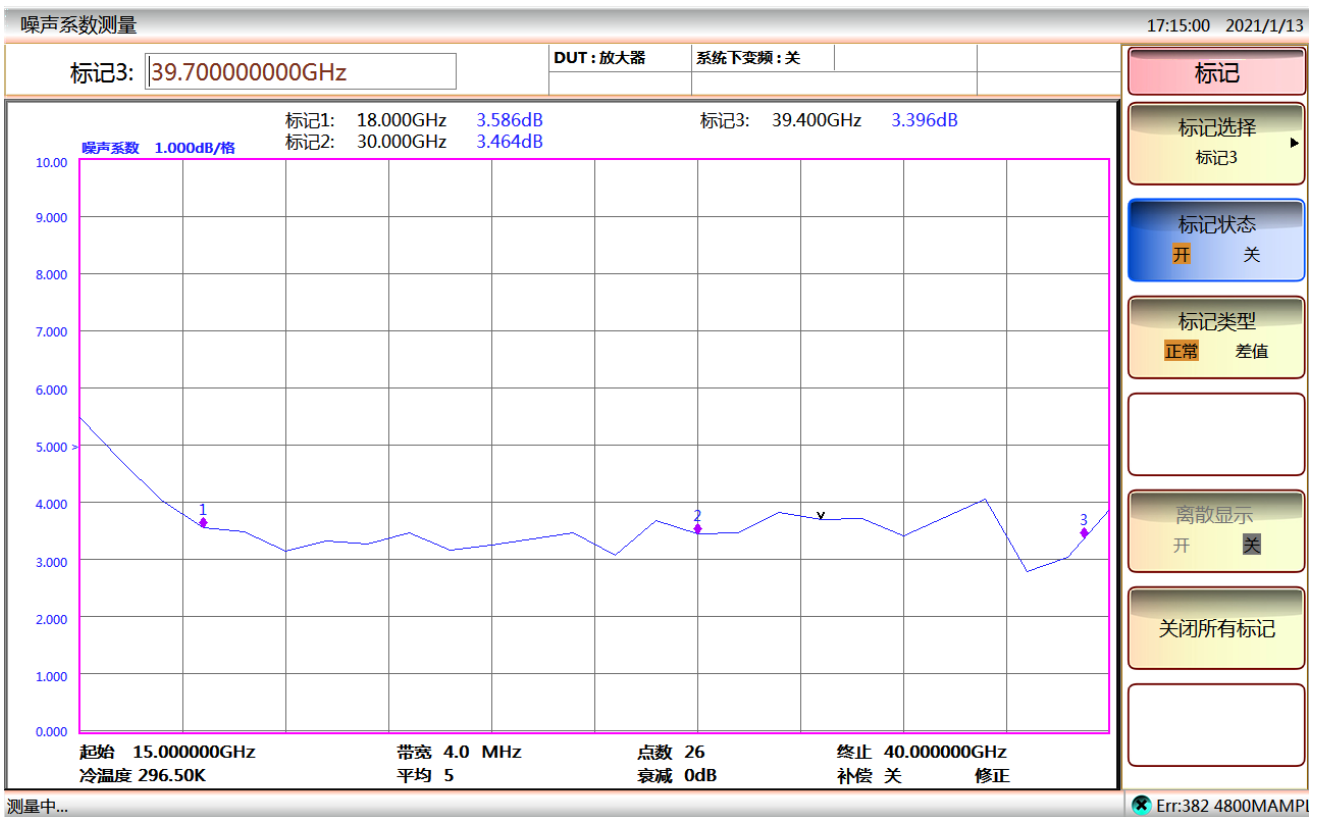


Input Return Loss vs Frequency



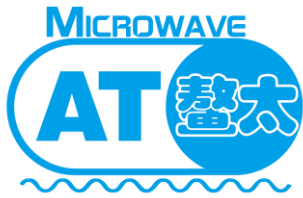


Output Return Loss vs Frequency



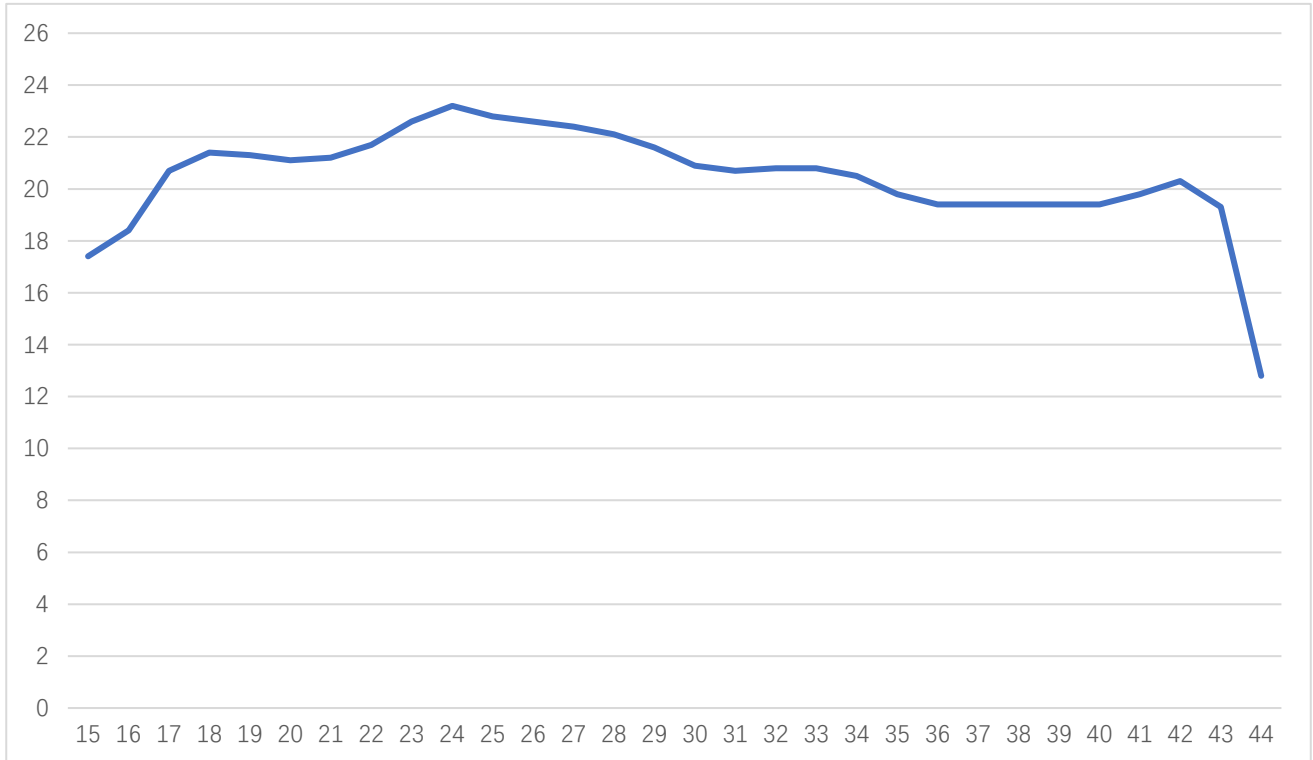
NF vs Frequency





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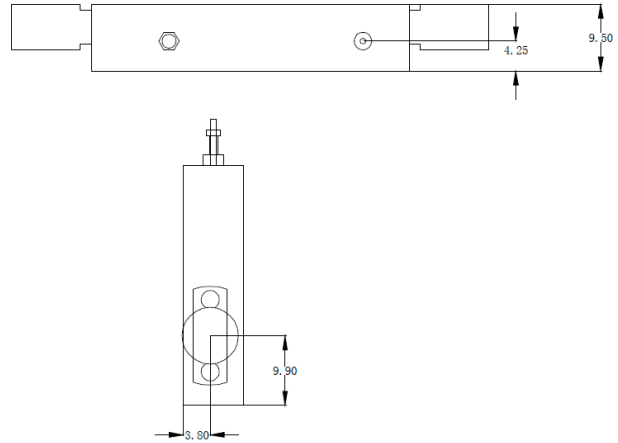
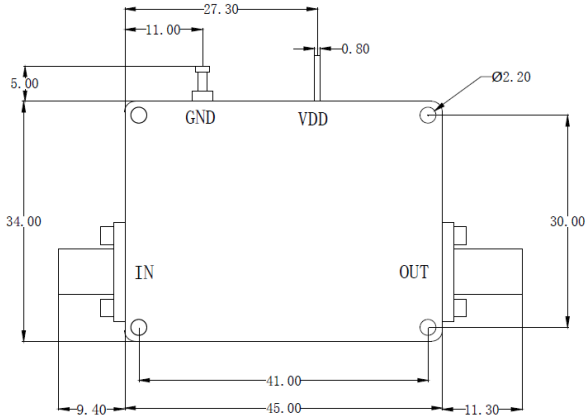
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Psat vs Frequency

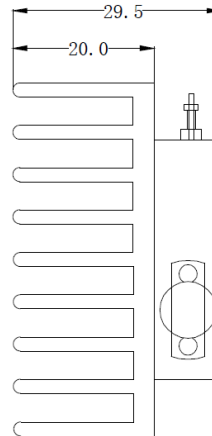
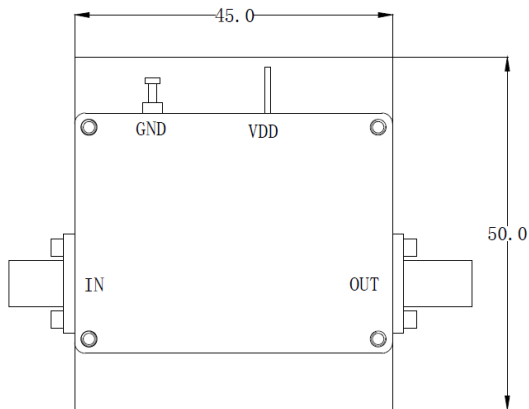


Dimension: (unit in mm)



	<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 During Operation if Temp over 50C

