

2-50GHz Low Noise Amplifier



Product Overview

AT-LNA-0250-3805C is high gain low noise amplifier with 38dB gain in the frequency of 2-50GHz. The DC power requirement is +5V/250mA. The module is with 2.4mm 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: 2-50GHz
- ✓ Small signal gain: 38dB
- ✓ NF=5dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		2-50GHz	
Gain	36	38 dB	
Gain Flatness(2-45GHz)		+/-2dB	
NF		5dB	8
P1Db		+10dBm	
Psat		2-43GHz: +15dBm 43-50GHz: +10dBm	
Drain Supply		+5V	+8V
Current		250 mA	300mA
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-LNA-0250-3805C

2-50GHz Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	2.4mm Female
Output Port	2.4mm 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	+15V
RF Input Power	+12dBm
Operating Temperature (note)	-20 to + 70C
Storage Temperature	-65 to +150C

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

Caution:

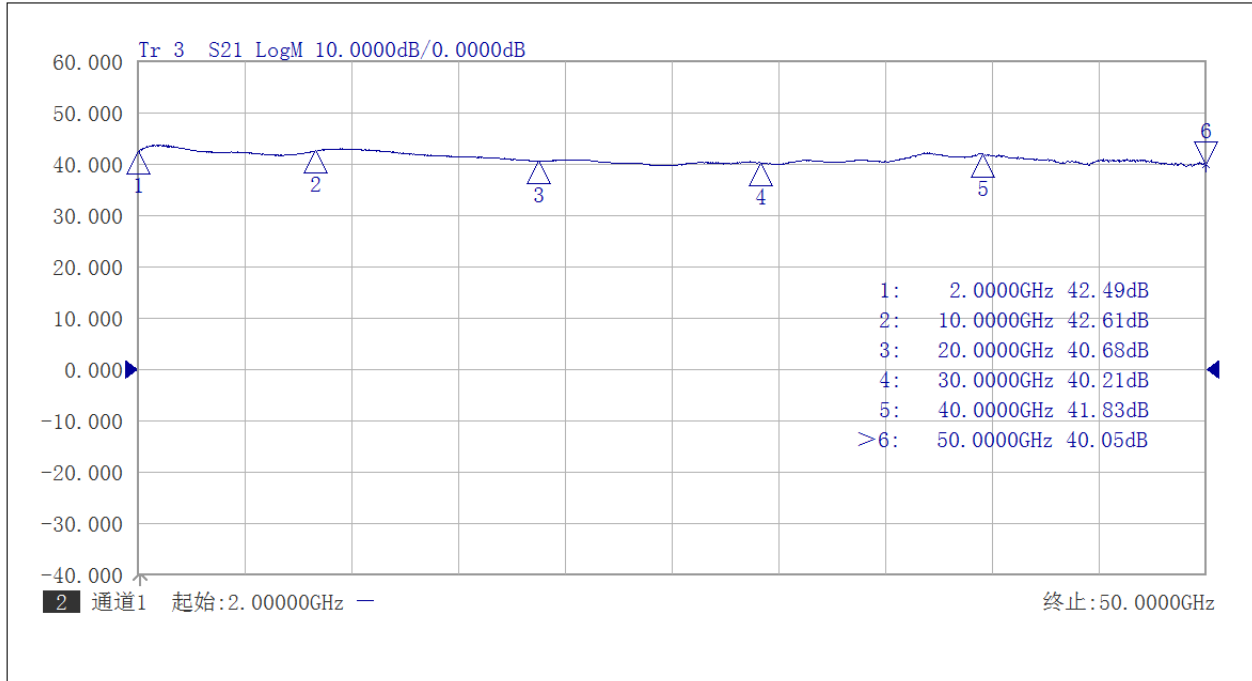
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

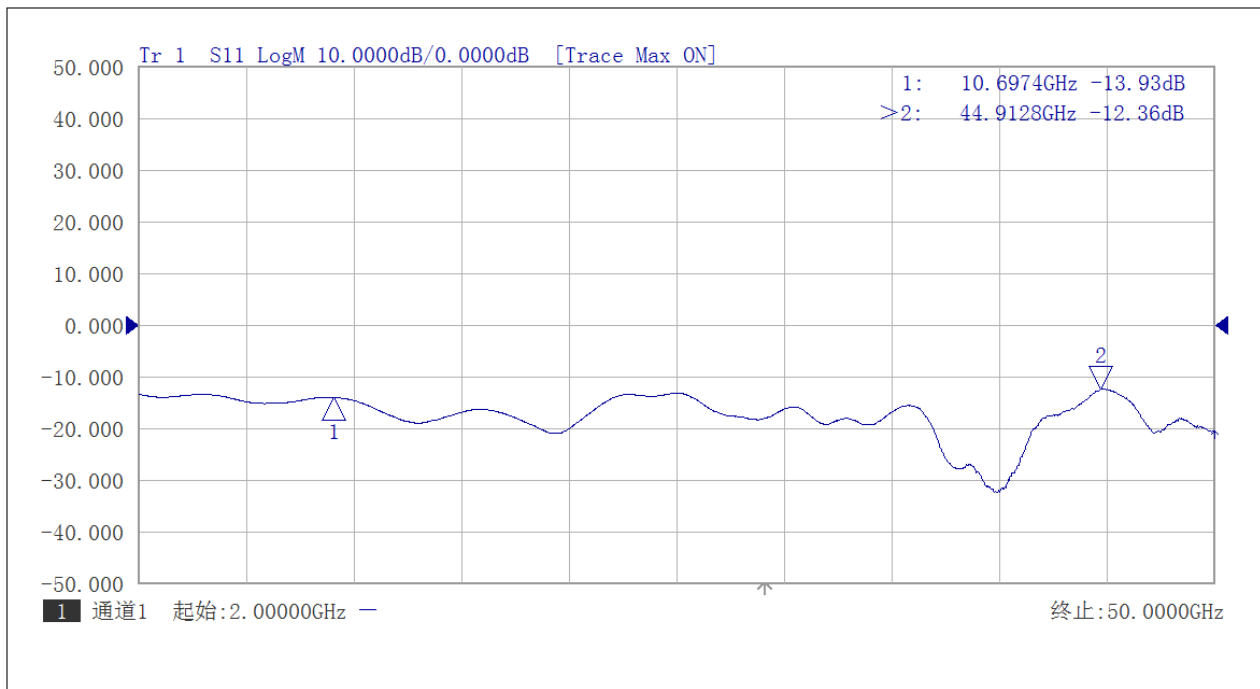
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:

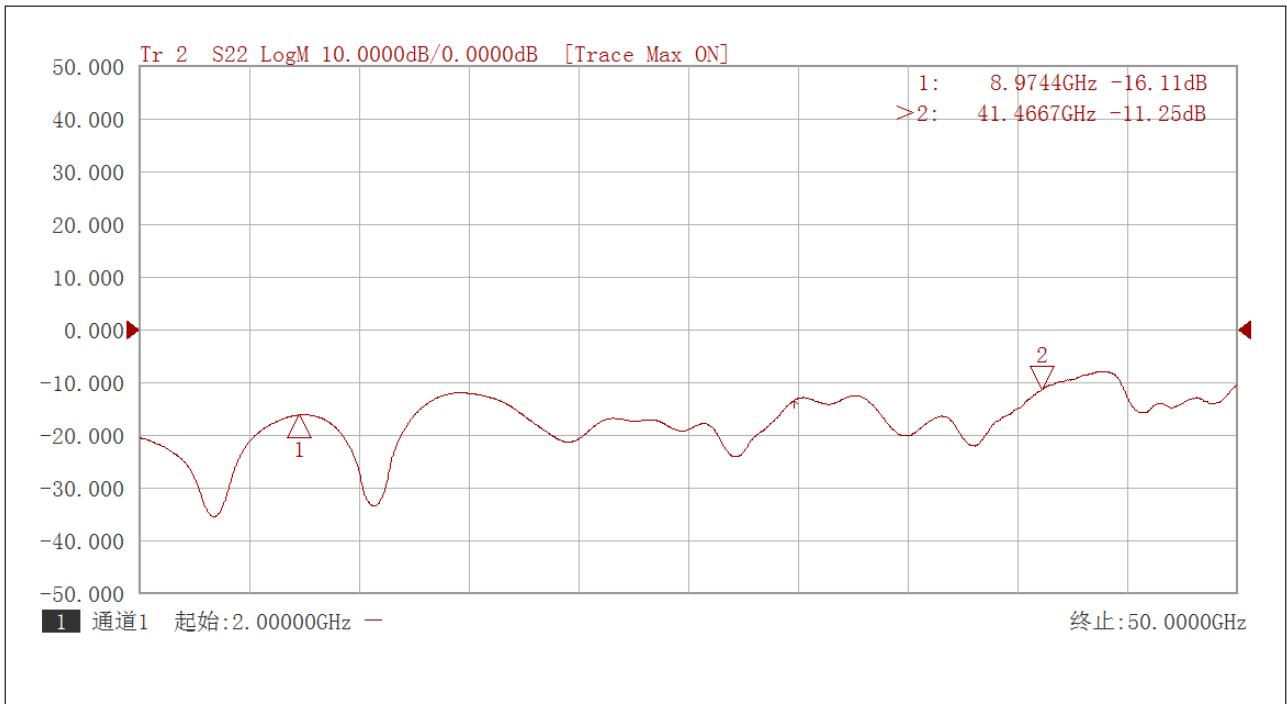


Gain vs Frequency

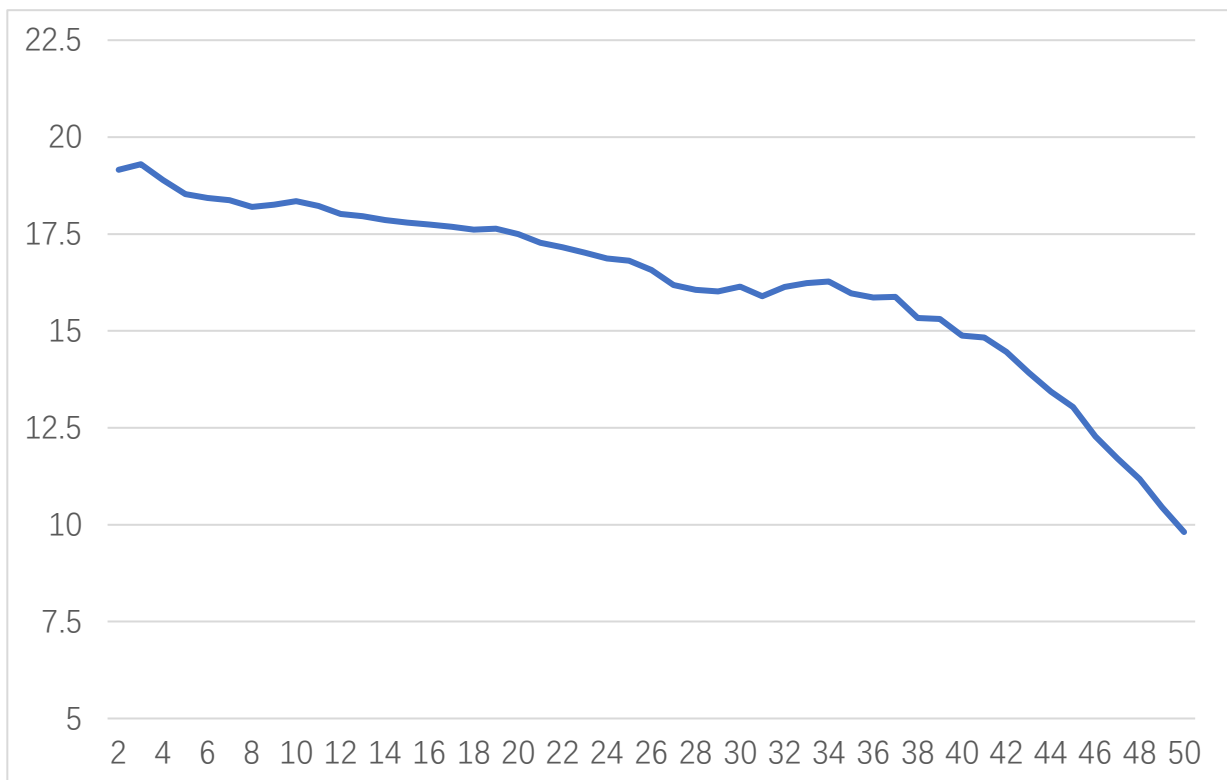


Input Return Loss vs Frequency





Output Return Loss vs Frequency



Pout vs Frequency, Pin=-20dBm





AT-LNA-0250-3805C

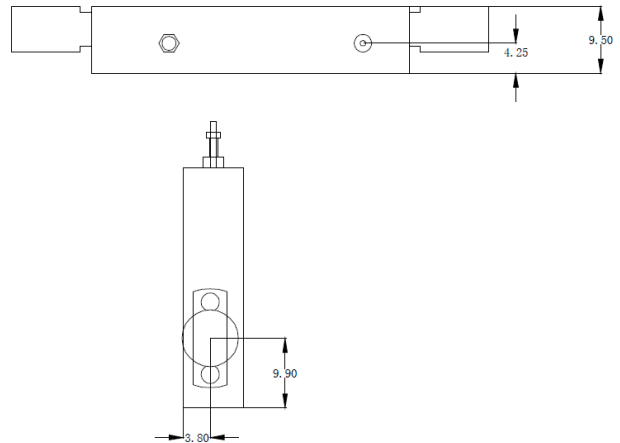
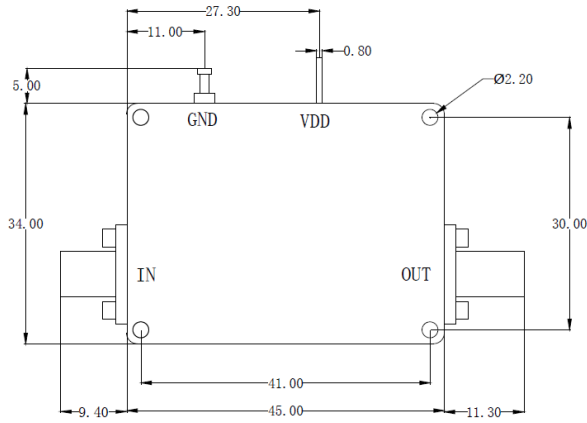
2-50GHz Low Noise Amplifier



NF 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.

Heat Sink Required If Case Temp Higher Than 50C

