

AT-LNA-1844-3803P20

18-44GHz Low Noise Amplifier

18-44GHz Low Noise Amplifier Positive Gain Slop, Low NF, High Power

2022-3-15



Product Overview

AT-LNA-1844-3803P20 is **positive gain slop**, high gain low noise amplifier with 38dB gain in the frequency of 18-44GHz. The DC power requirement is +5V/280mA. 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: 18-44GHz
- ✓ Small signal gain: 38dB
- ✓ NF=3dB
- ✓ High Power: +20dBm

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		18-44GHz	
Gain	35	38 dB	
Gain Flatness		Positive Gain Slop	
NF (18-40GHz)		3dB	4dB
P1dB		+18dBm	
Psat		+20dBm	
Drain Supply		+5V	+8V
Current		280 mA	350mA
Input Return Loss (18-40GHz)	-5	-10 dB	
Output Return Loss (18-40GHz)	-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 (Without Heatsink)	80g
Size:	See outline

Absolute Maximum Ratings Table

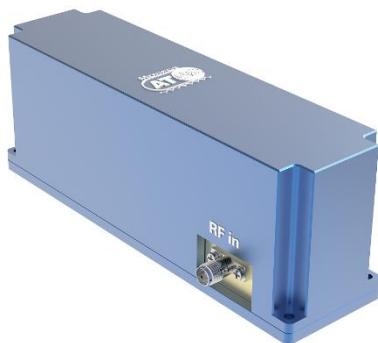
Parameter	Value
Drain Supply	+13V
RF Input Power	+15 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

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.

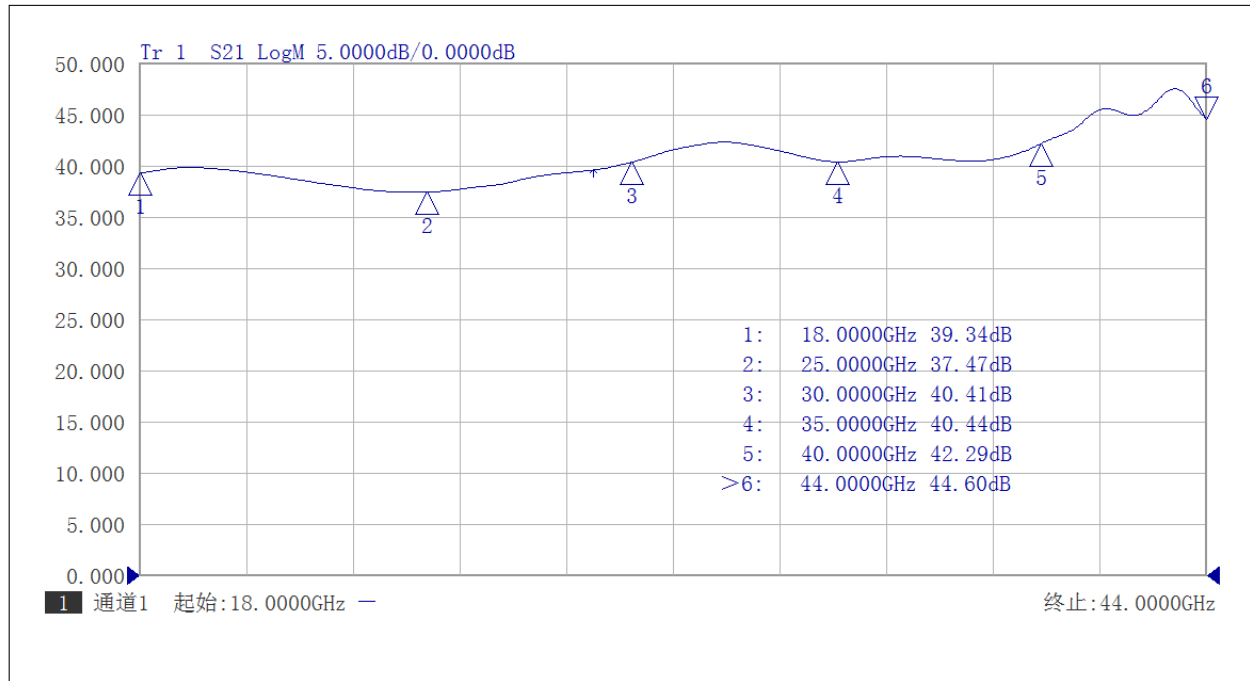
Part Number Selection Guide

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

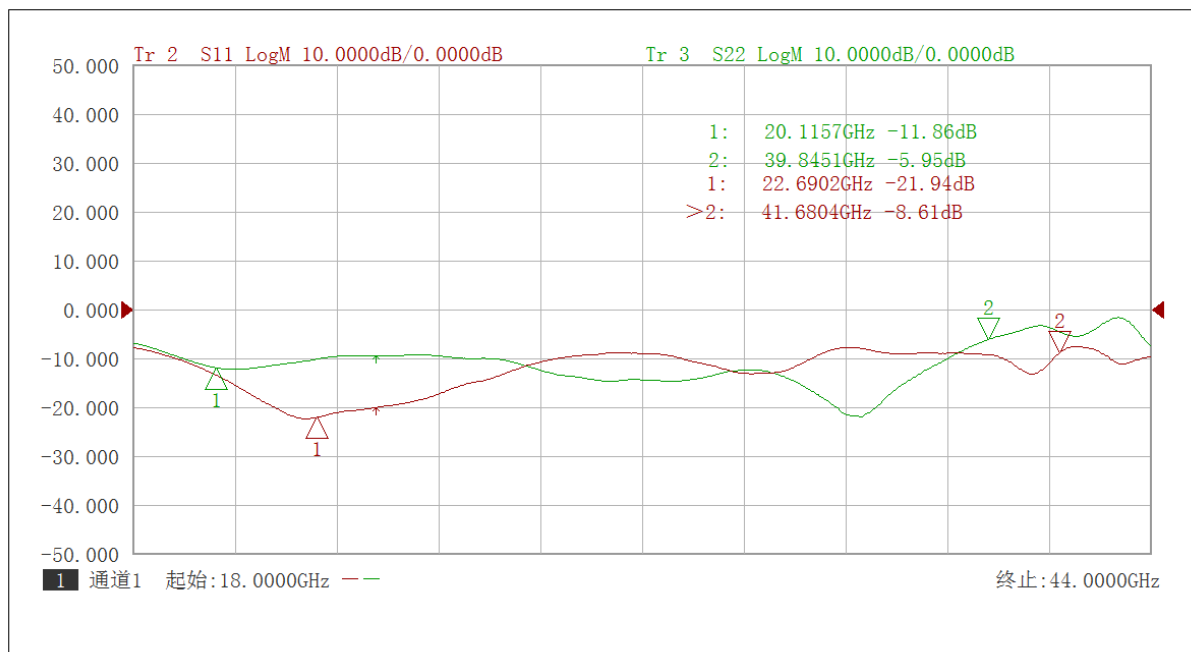


Test Data (25C)

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

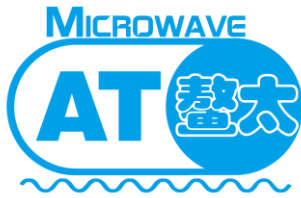


Gain vs Frequency



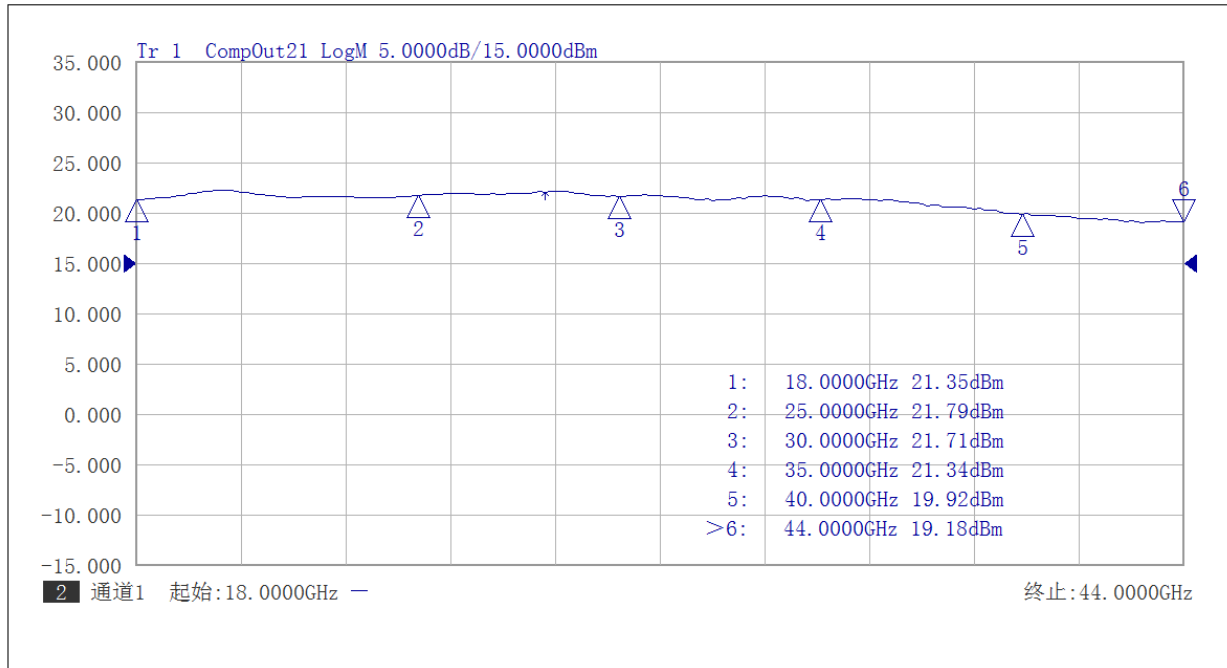
Return Loss vs Frequency





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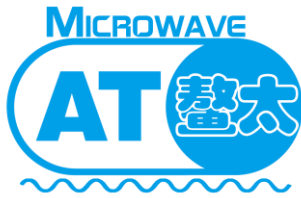


P1dB vs Frequency



NF vs Frequency

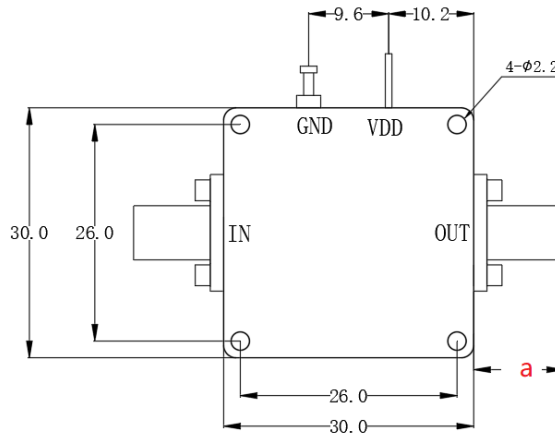




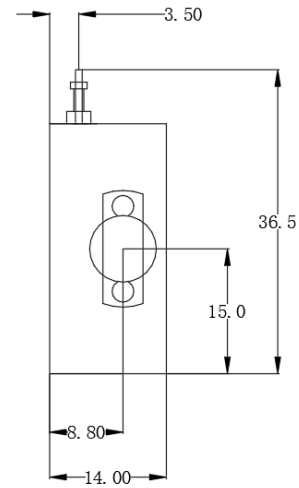
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Dimension: (unit in mm)



In millimetres



	<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.

