

Full D Band LNA, 110-170GHz

2022-6-1

High gain=33dB , NF=6dB, WR-06



Product Overview

AT-LNA-110170-3306T is high gain low noise amplifier operating in the 110-170 GHz frequency range. The LNA is packaged in a waveguide module using industry standard WR-06.

MMIC technology LNA Chip is used, which ensures reliable and repeatable unit-to-unit result. Higher gain amplifier can be achieved.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 110-170GHz
- ✓ High Gain: 33dB
- ✓ NF: 6dB
- ✓ Single Supply

Application

- ✓ D Band Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)

Key Features

Parameter	Min	Typical	Max
Frequency		110-170GHz	
Gain	32dB 27dB	110-150GHz: 35dB 150-170GHz: 30dB	
Noise Figure		6dB	8dB
Input Power		-40dBm	-10dBm
Output P1dB		-3dBm	
Psat		+0dBm	
Drain Supply		+5V	+6V
Current		70mA	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





AT-LNA-110170-3306T

110-170GHz Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	WR-06
Output Port	WR-06
Case Material	Copper
Finish	Gold Plated
Weight	150g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+8V
RF Input Power	+8dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

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.

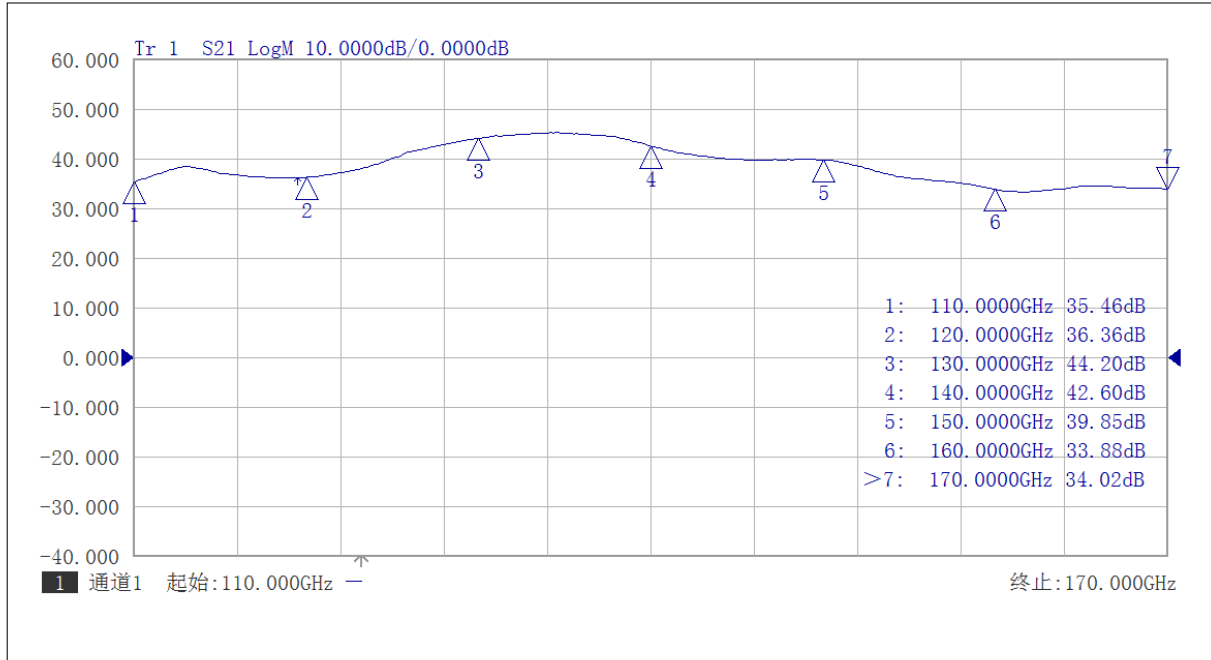
Part Number Selection Guide

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

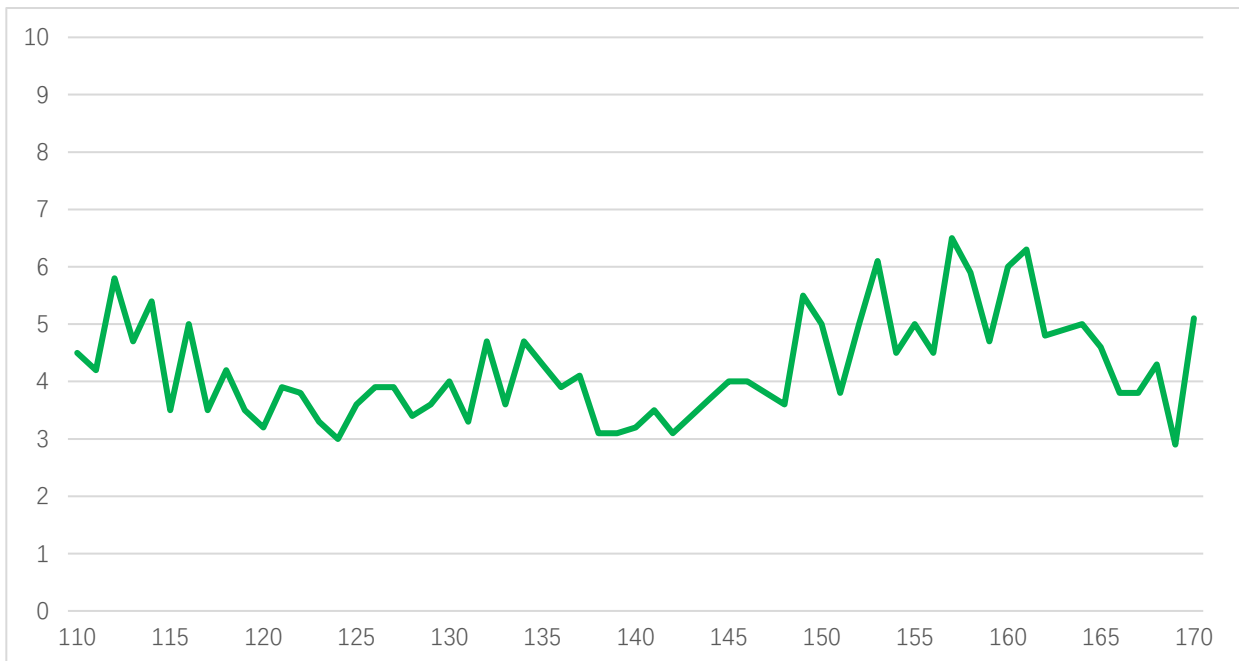


Test Data (25C)

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

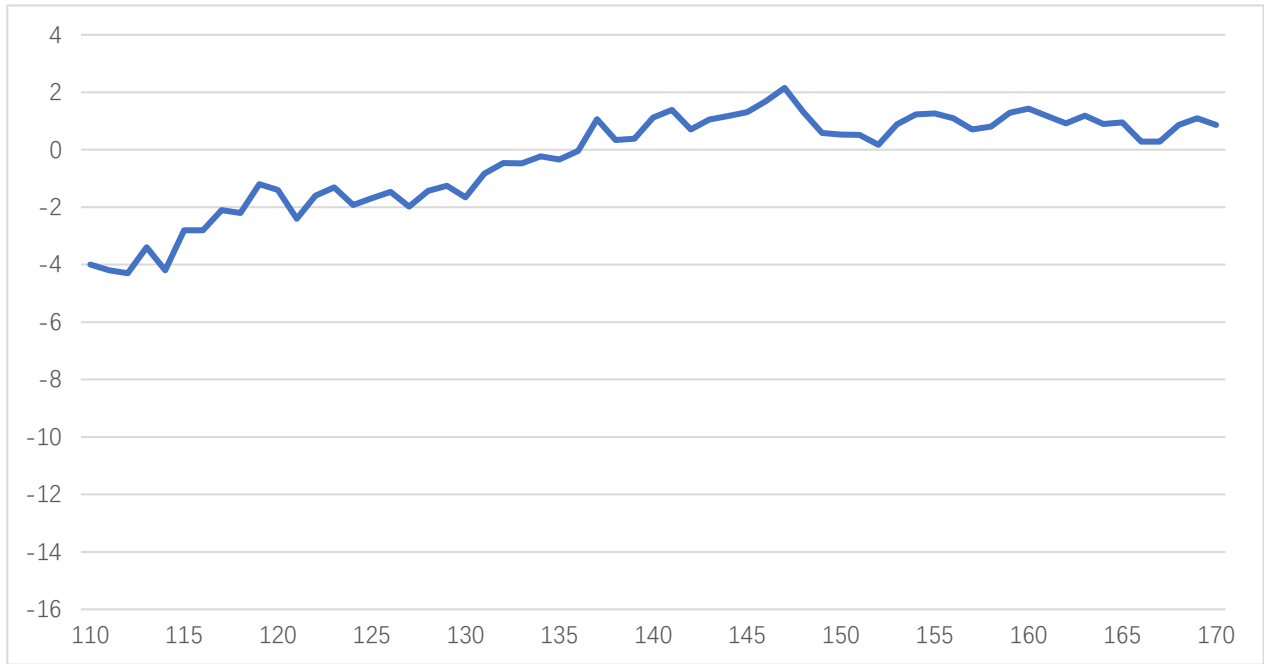


Gain vs Frequency



NF vs Frequency





Psat vs Frequency

Dimension: (unit mm)

