

140-200GHz LNA, 20dB Gain, NF=6dB 2022-9-1



Product Overview

AT-LNA-140200-1606T is a low noise amplifier operating in the 140-200 GHz frequency range. The LNA is packaged in a waveguide module using industry standard WR-05.

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: 140-200GHz
- ✓ High Gain: 16dB
- ✓ NF: 6dB
- ✓ Single Supply

Application

- ✓ G/J Band Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		140-200GHz	
Gain	14	16dB	
Noise Figure(Note)		140-170GHz: 6dB	
Pin		-20dBm	-10dBm
Output P1dB		-3dBm	
Psat		+0dBm	
Drain Supply		+5V	+8V
Current		39mA	
Input/Output VSWR		2.5	
Spec Temp		25C	

Note: NF only test to 170GHz due to the test limit.





AT-LNA-140200-1606T

140-200GHz Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	WR-05
Output Port	WR-05
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	165g
Size:	To be added.

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+8V
RF Input Power	+8dBm
Operating Temperature	0 to +50C
Storage Temperature	-20 to +70C

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.

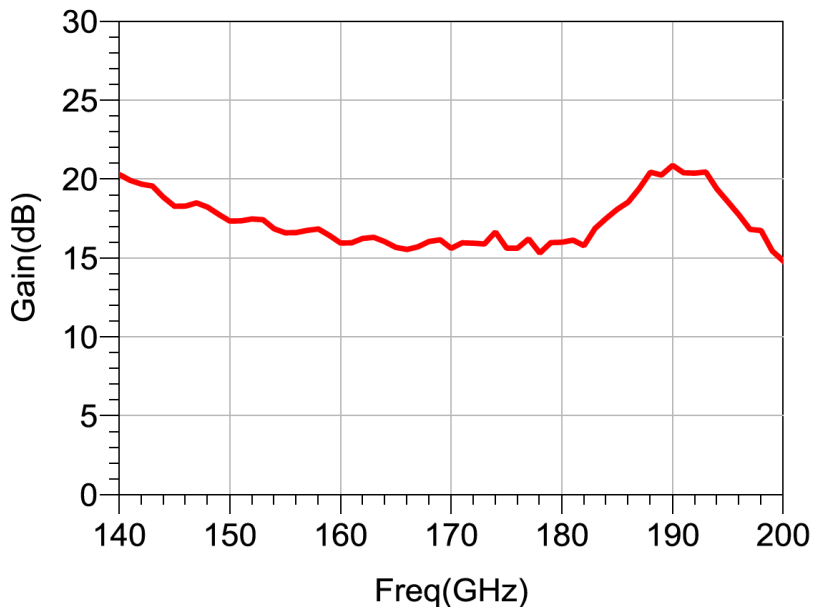
Part Number Selection Guide

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

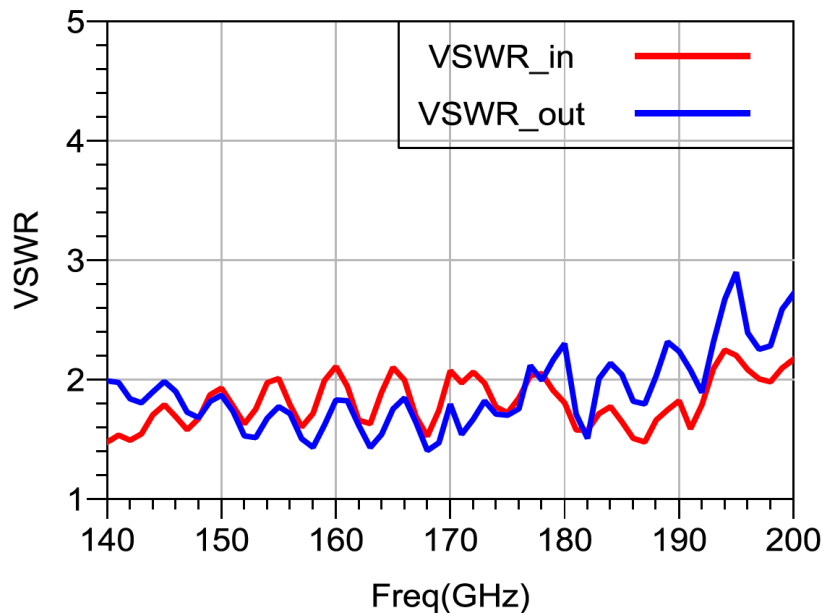


Test Data (25C)

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

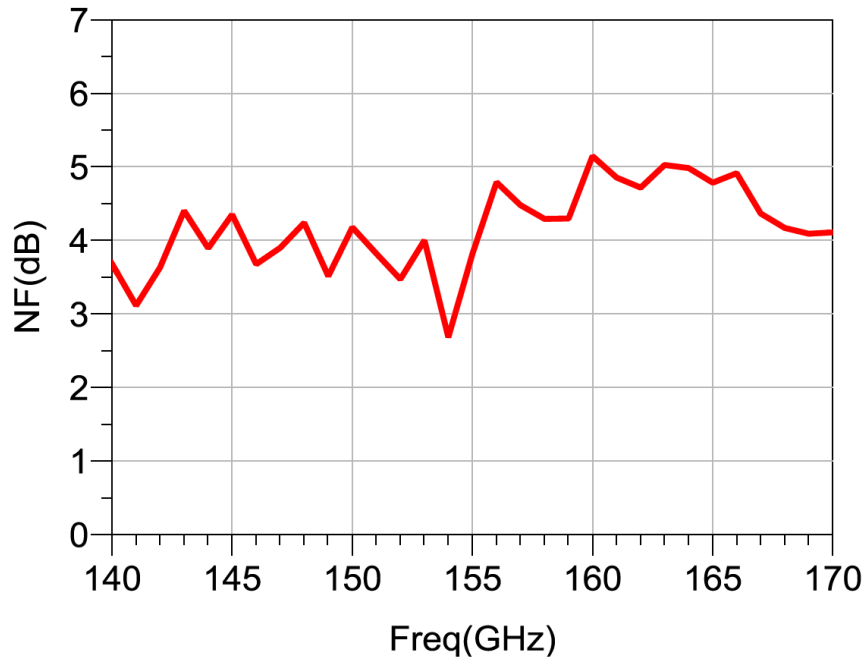


Gain vs Frequency



VSWR vs Frequency





NF vs Frequency

Dimension: (mm)

To be added.

