

W Band LNA, 18dB Gain, NF=4dB



Product Overview

AT-LNA-75110-1804T is a low noise amplifier operating in the 75-110 GHz frequency range. The LNA is packaged in a waveguide module using industry standard WR10.

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: 75-110GHz
- ✓ High Gain: 18dB
- ✓ NF: 4dB
- ✓ Single Supply

Application

- ✓ W band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		75-110GHz	
Gain	16	18dB	
Noise Figure		4dB	6
Pin		-30dBm	-10dBm
Output P1dB		+0dBm	
Psat		+2dBm	
Drain Supply		+5V	+8V
Current		35mA	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





AT-LNA-75110-1804T

75-110GHz 18dB Gain, NF 4dB Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight	189g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+3dBm
Operating Temperature	0 to +50C
Storage Temperature	-75 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.

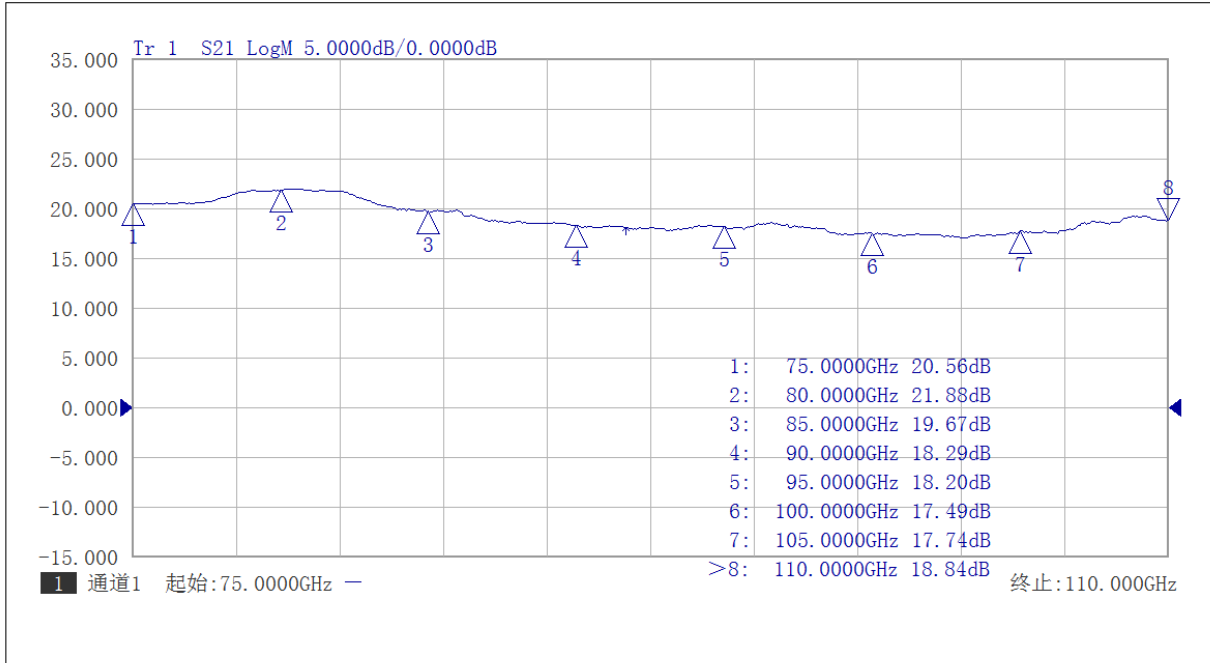
Part Number Selection Guide

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

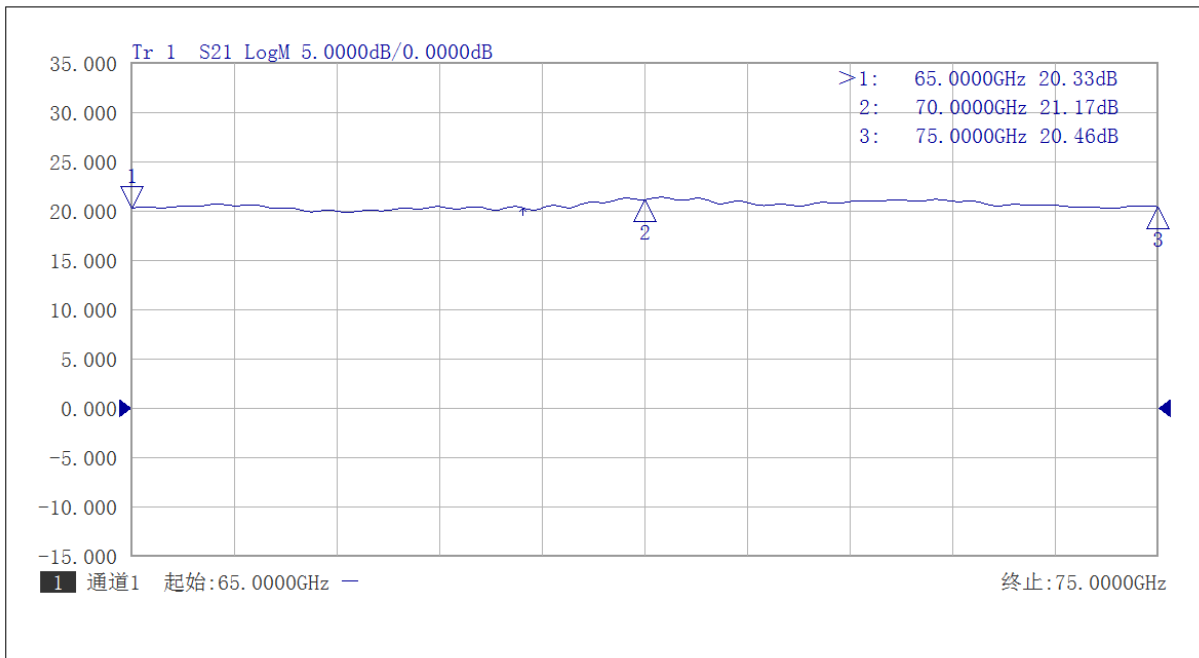


Test Data (25C)

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



Gain vs Frequency 75-110GHz



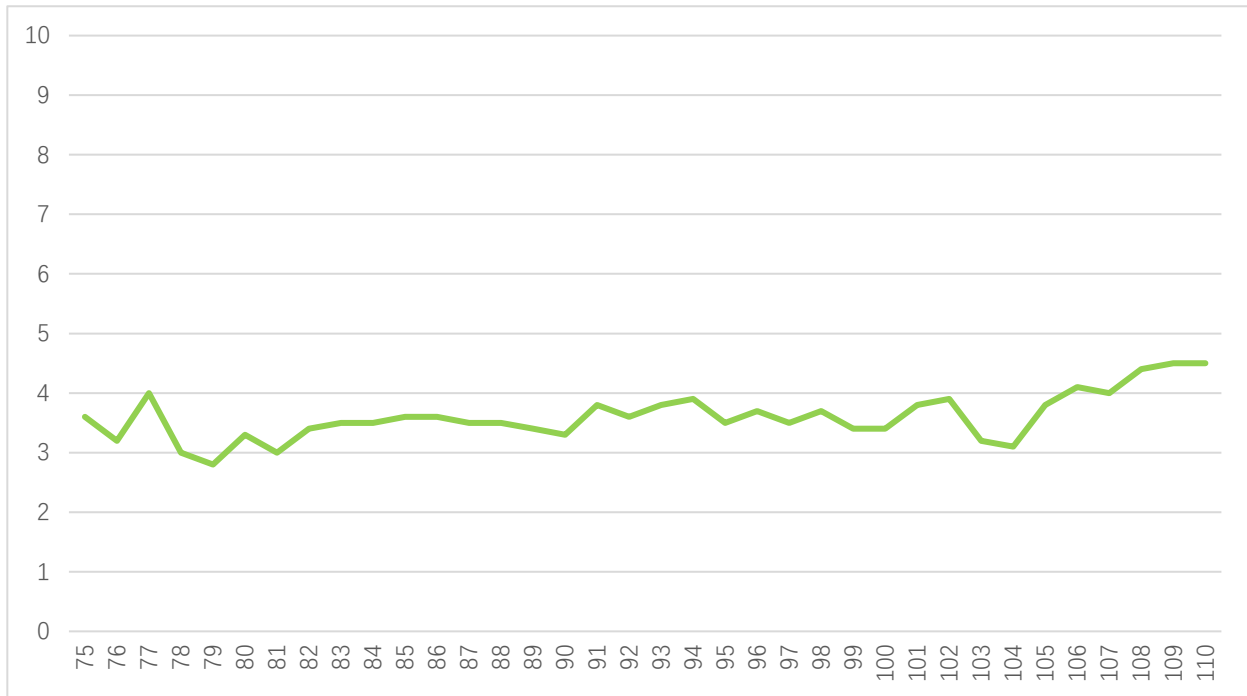
Gain vs Frequency 75-75GHz





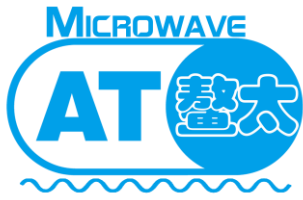
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NF vs Frequency





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75-110GHz 18dB Gain, NF 4dB Low Noise Amplifier

Dimension: (mm)

