

50-75GHz Broadband Low Noise Amplifier Super Low NF=2.5dB, High Gain=38dB



Product Overview

AT-PA-5075-3825T is low noise amplifier with 38dB gain in the frequency of 50-75GHz. The DC power requirement is +5V/100mA. The module is with a standard WR-15 waveguide.

Lower gain modules with 18dB gain modules is available.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 50-75GHz
- ✓ NF: 2.5dB
- ✓ Small signal gain: 38dB
- ✓ Single Power Supply

Application

- ✓ V Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		50-75GHz	
Gain	34	38dB	
Gain Flatness		+/-3dB	
Drain Supply		+5V	+8V
NF		2.5 dB	3.5 dB
P1Db		+5dBm	
Psat		+8dBm	
Current		100mA	
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Spec Temp		25C	





AT-LNA-5075-3825T

Full V Band Low Noise Amplifier

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+10dBm
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



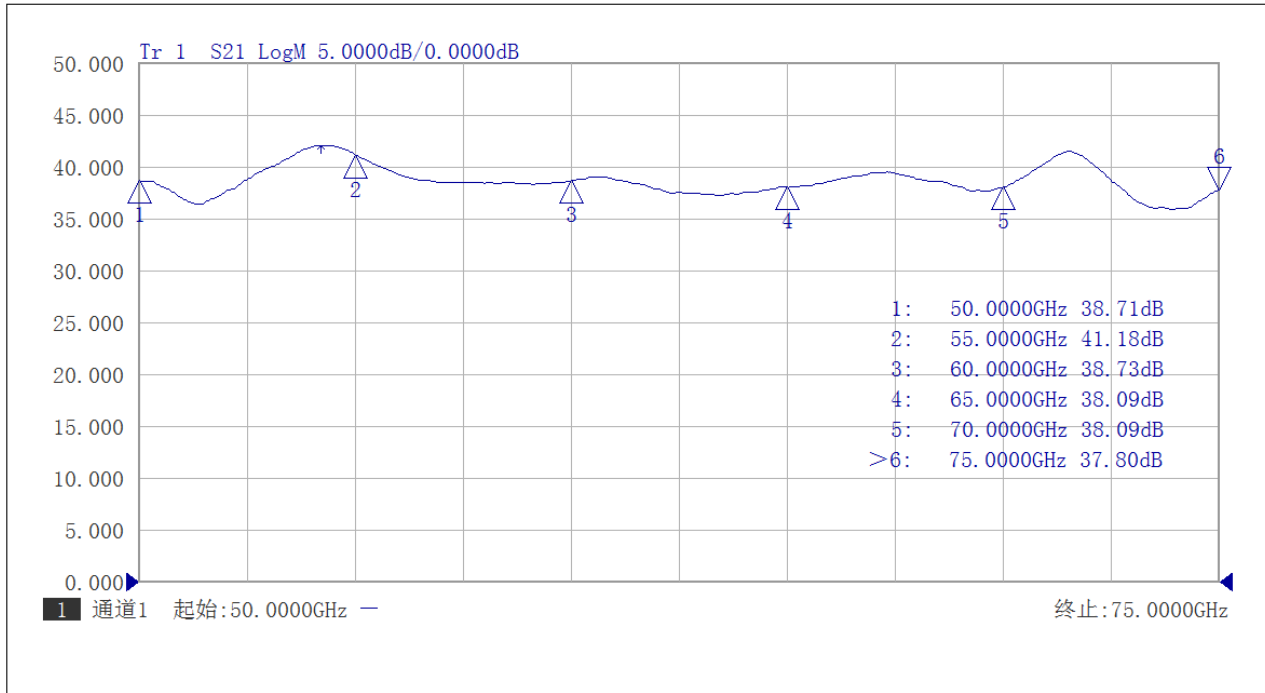


AT-LNA-5075-3825T

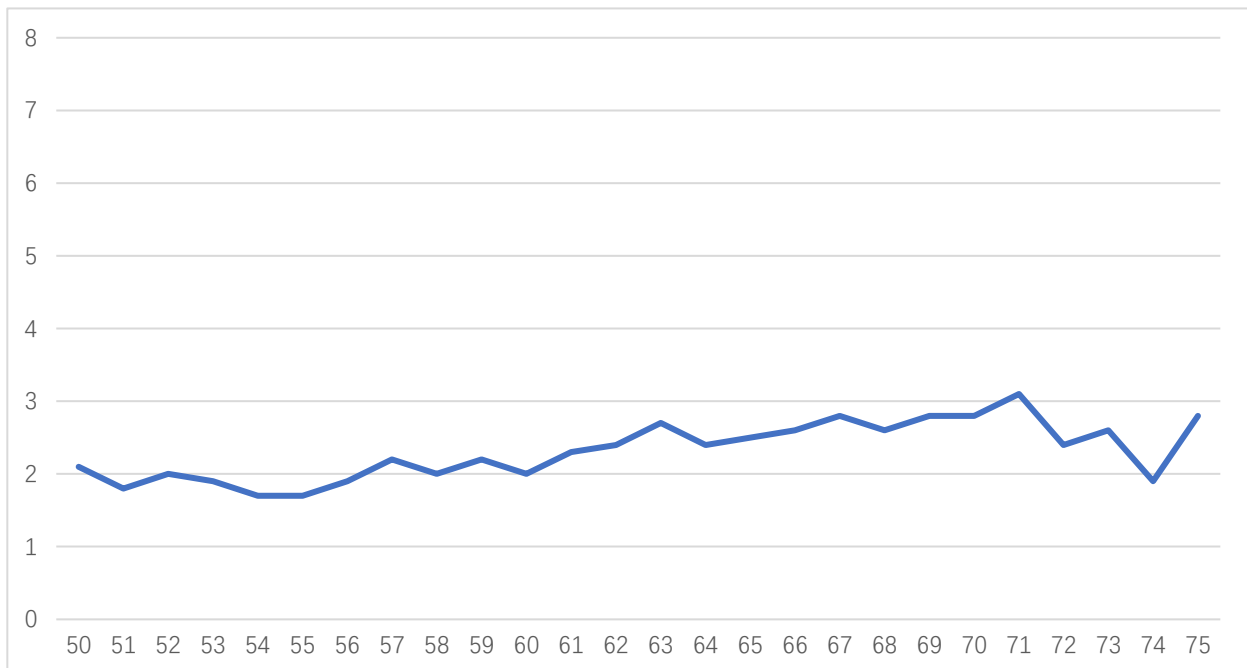
Full V Band Low Noise Amplifier

Test Data (25C)

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

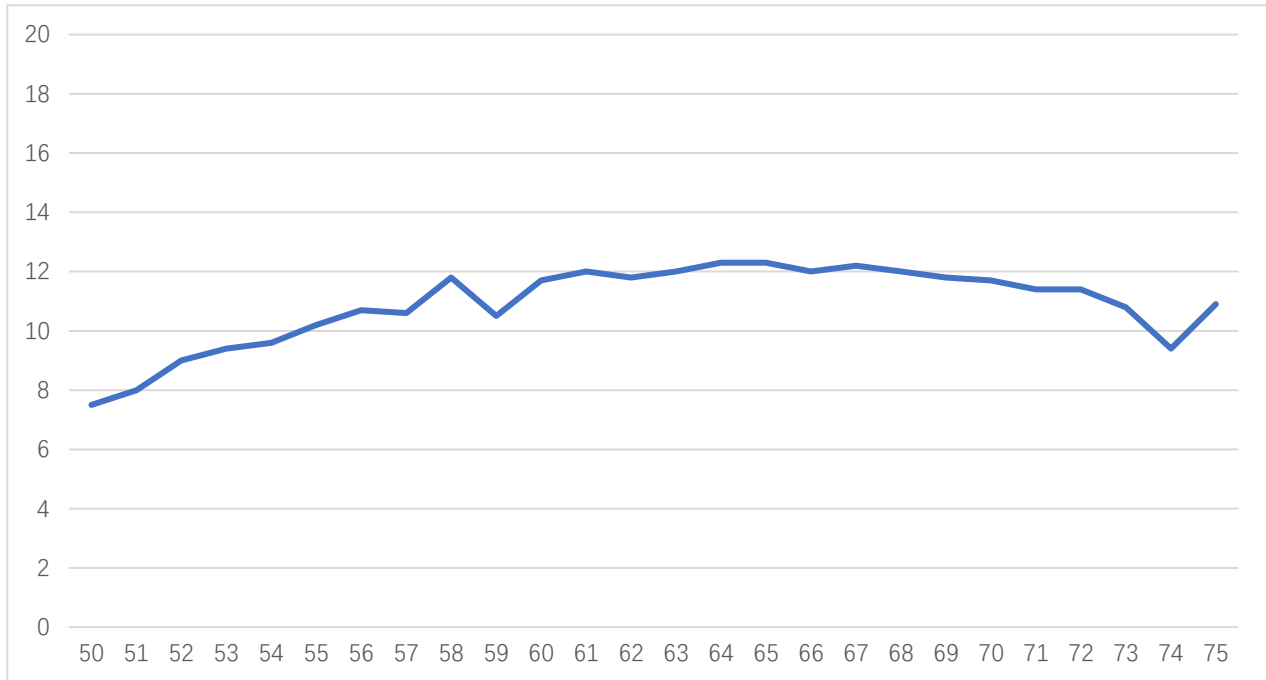


Gain vs Frequency



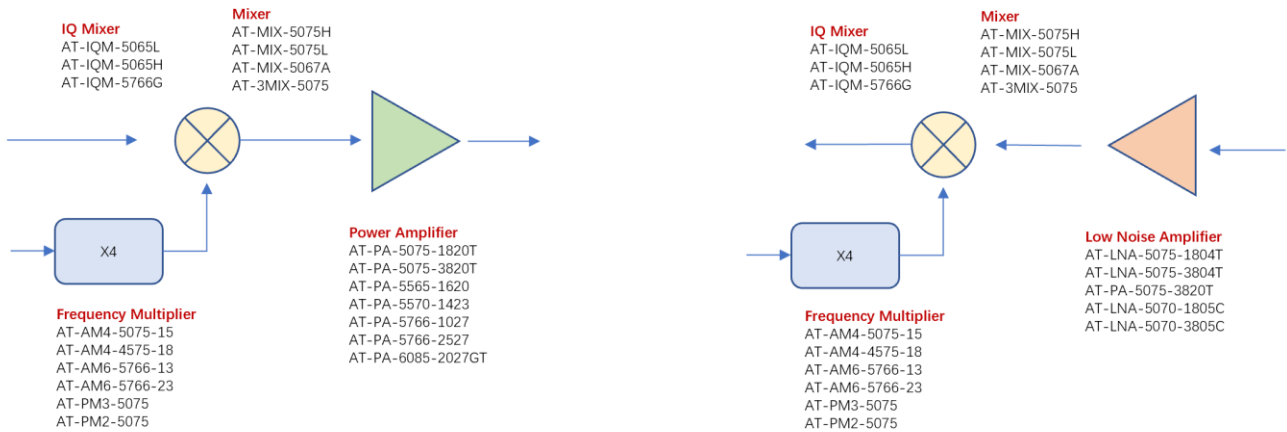
NF vs Frequency





Psat vs Frequency

V Band 50-75GHz



Dimension: (unit in mm)

