



AT-PA-5075-3820T

50-75GHz Medium Power Amplifier

Full V Band High Power Amplifier

2022-3-22

Gain=38dB, Pout=+20dBm, NF=4dB, WR-15



Product Overview

AT-PA-5075-3820T is high power amplifier with +20dBm output power in the frequency of 50-75GHz. The DC power requirement is +5V/600mA. The module is with a standard WR-15 waveguide.

The amplifier is with low NF=5dB, which can be use as both power amplifier and low noise amplifier application.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 50-70GHz
- ✓ P1dB:+20dBm
- ✓ 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	35	38 dB	
P1Db		+18dBm	
Psat		+20dBm	
NF		4dB	
Drain Supply		+5V	+8V
Current		600 mA	
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	

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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

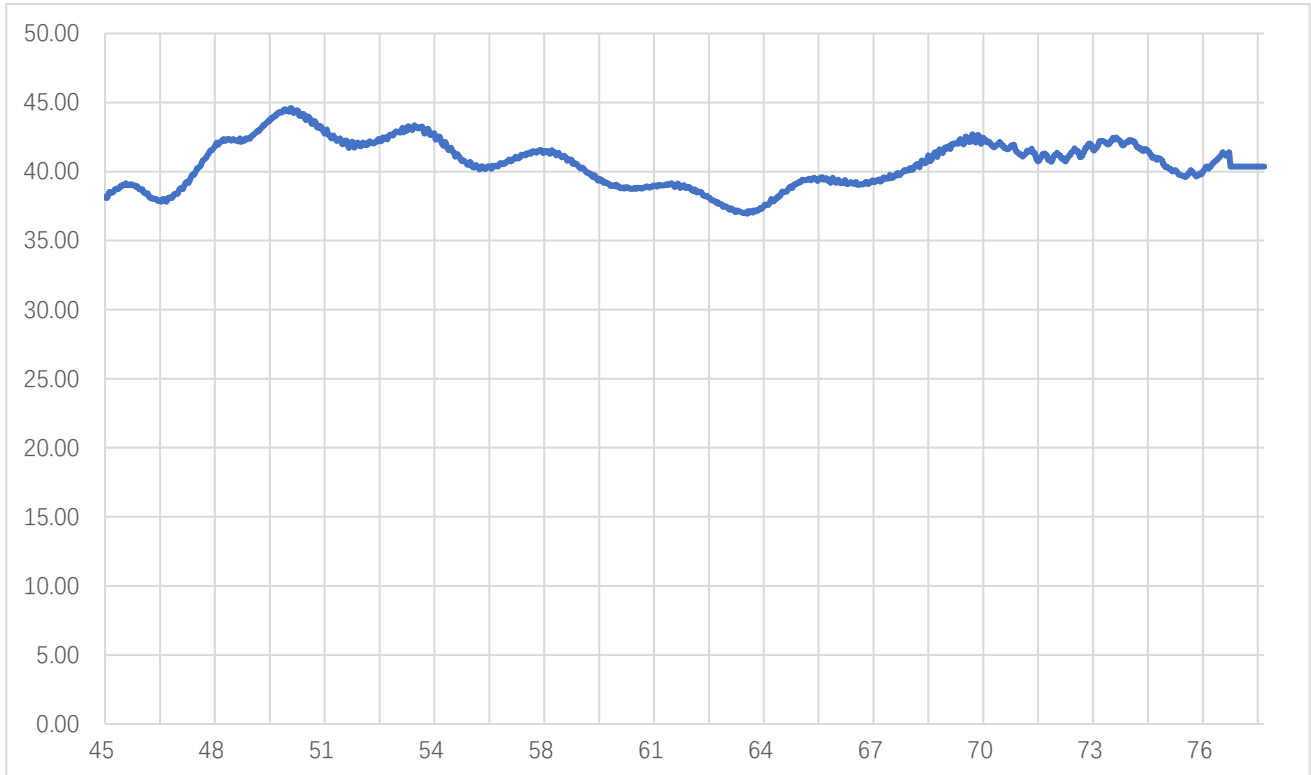




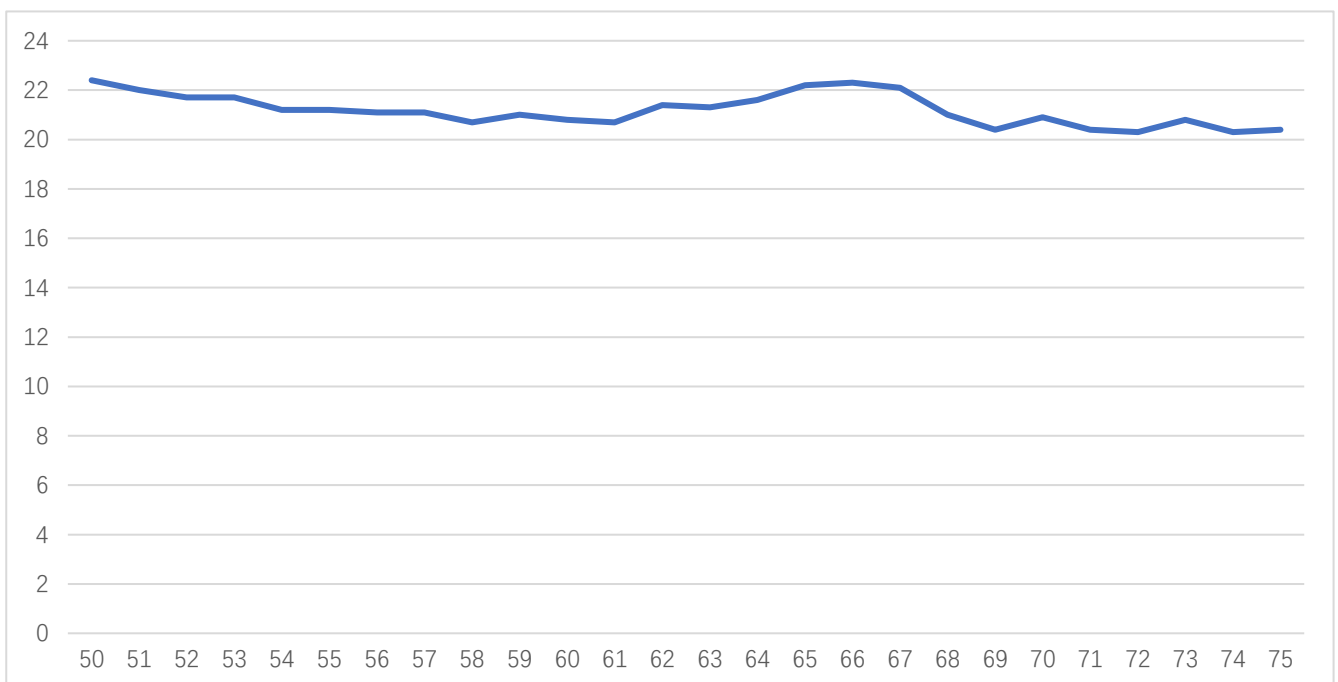
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Test Data:

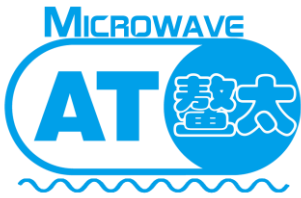


Gain vs Frequency



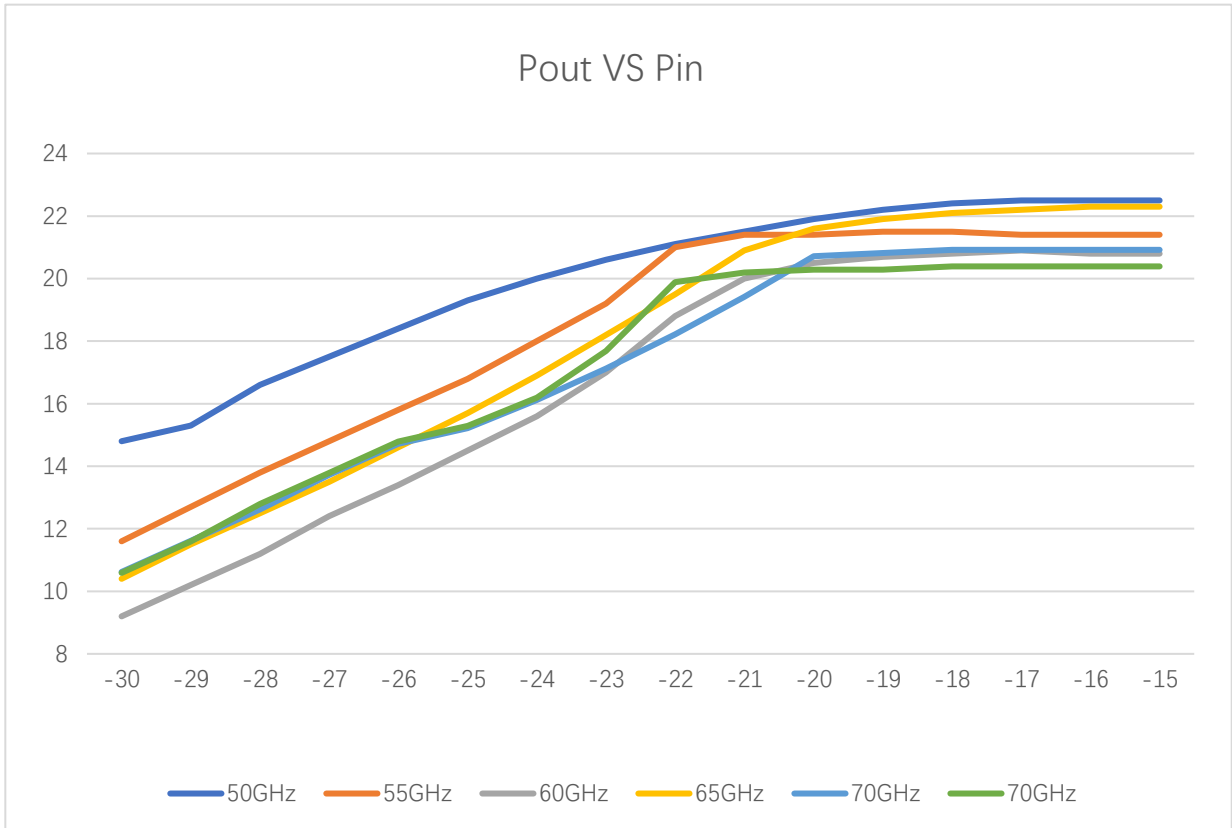
Psat vs Frequency



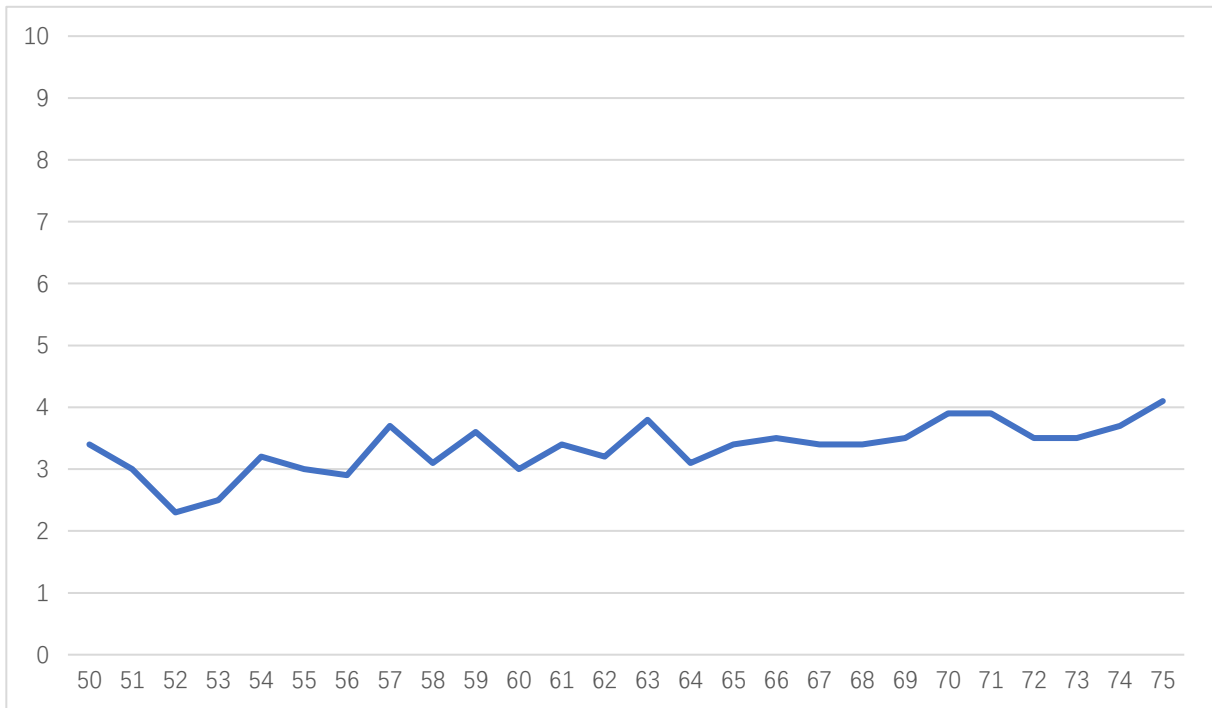


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Pout vs Pin



NF vs Frequency

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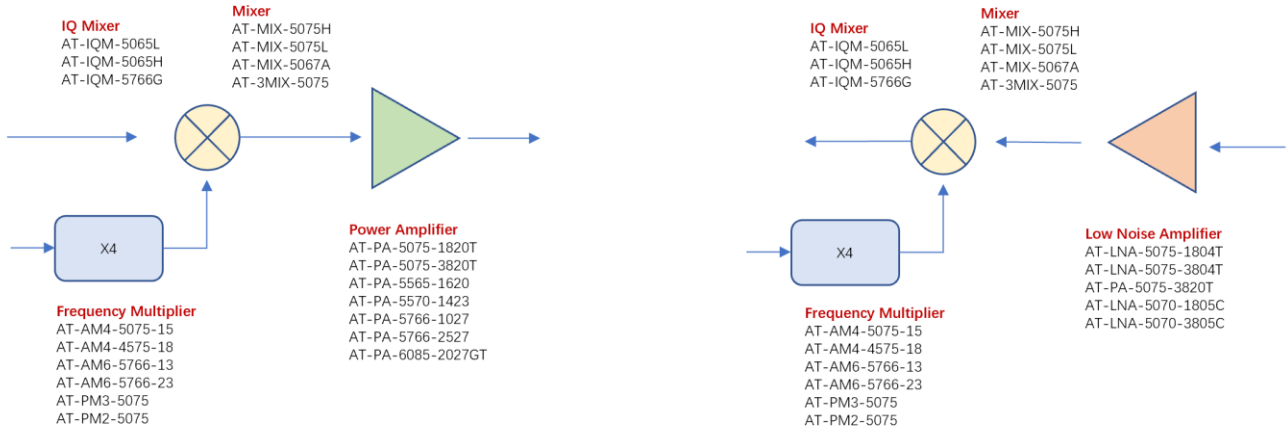
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V Band 50-75GHz



Dimension: (unit in mm)

