

50-75GHz Broadband Power Amplifier

2021-5-30



Product Overview

AT-PA-5075-1820T is medium power amplifier with 18dB gain in the frequency of 50-75GHz. The DC power requirement is +5V/290mA. The module is with a standard WR-15 waveguide. It can also be used from 45-75GHz.

Other power modules is available according to request. More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 50-75GHz
- ✓ Psat: +20dBm
- ✓ Small signal gain: 18dB
- ✓ 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	15dB	18dB	
Drain Supply		+5V	+8V
P1dB		+18dBm	
Psat		+20dBm	
Quiescent Current		0.29A	0.35A
IDD at Psat		0.5A	0.65A
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	





AT-PA-5075-1820T

Full V Band Medium Power Amplifier

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	100g
Size:	40x25X20 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
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

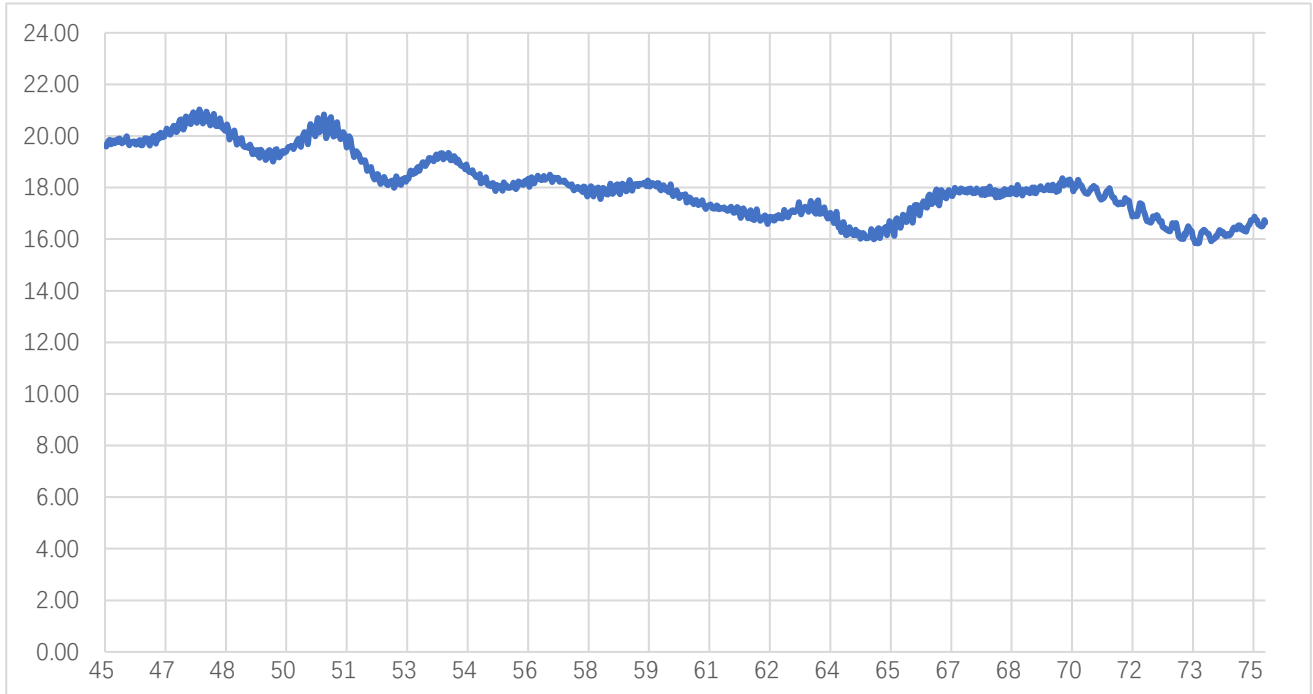




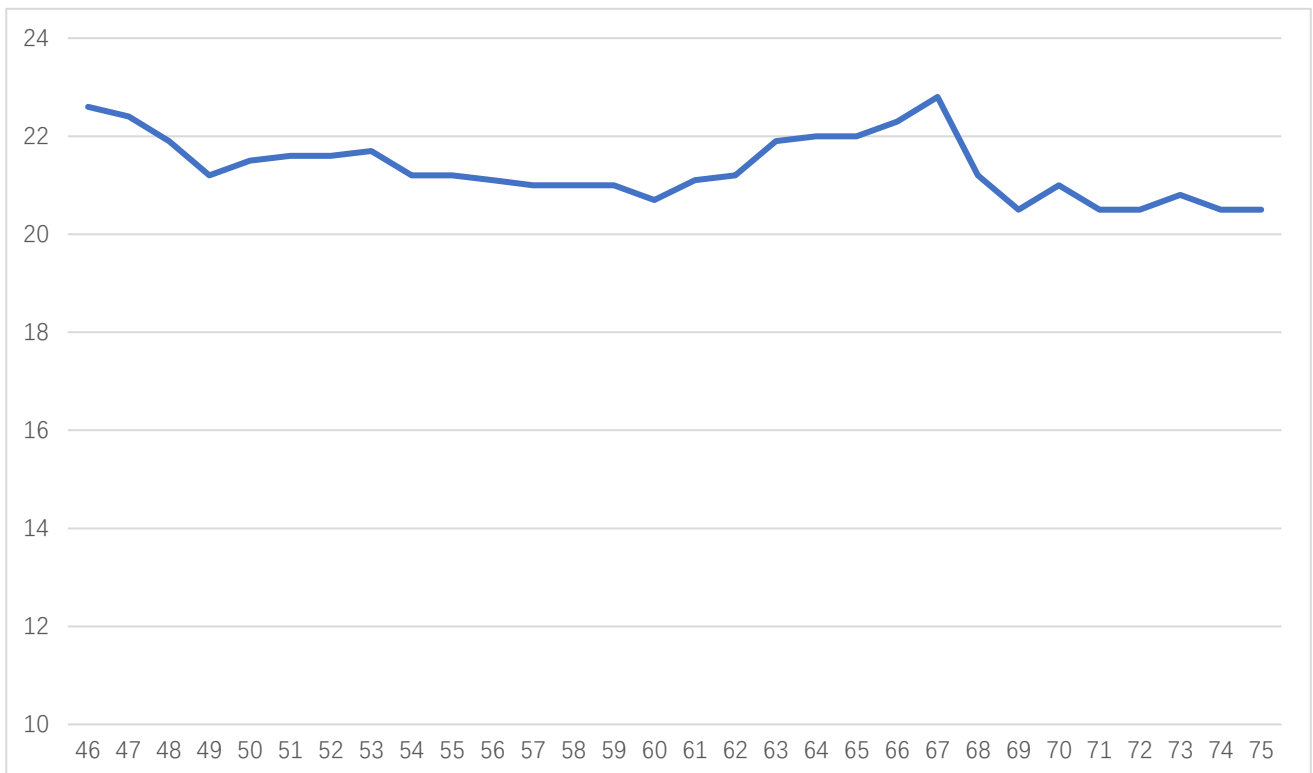
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Full V Band Medium Power Amplifier

Test Data:

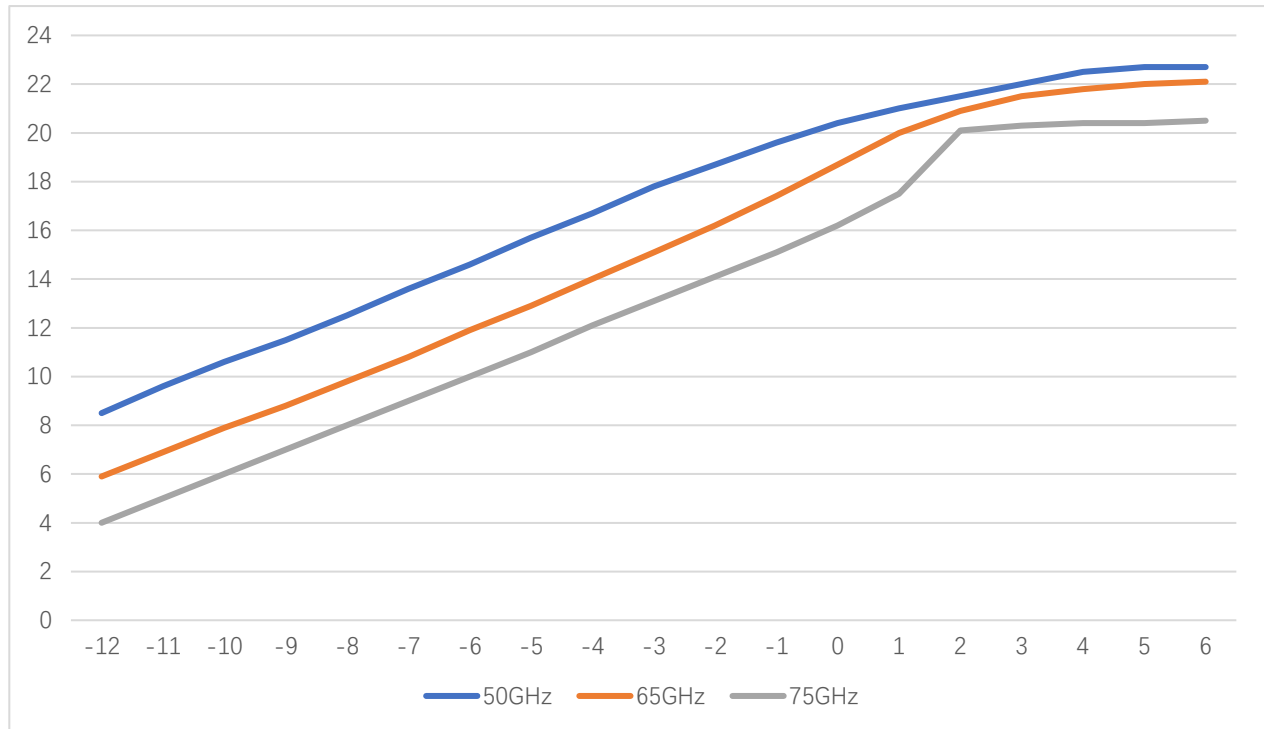


Gain vs Frequency



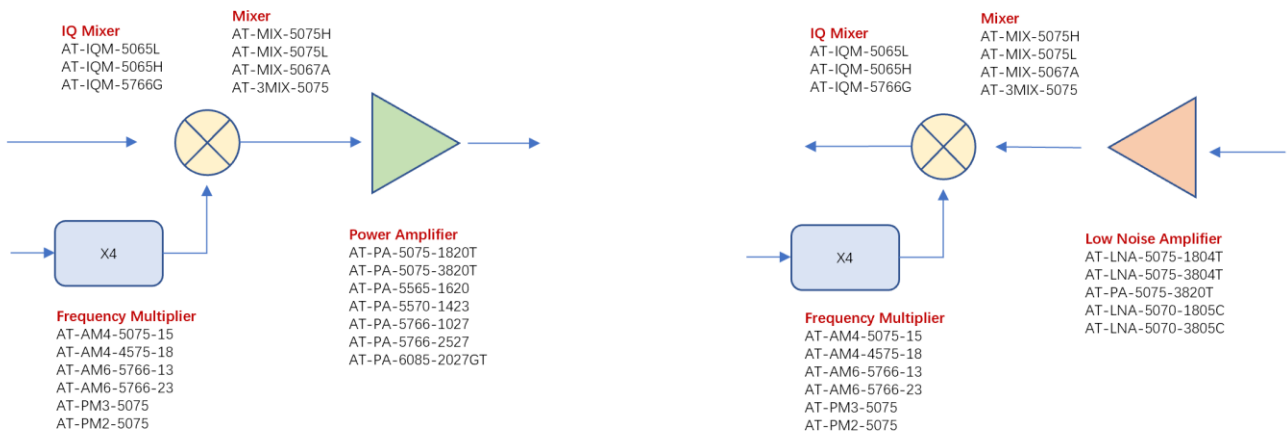
Psat vs Frequency





Pout vs Pin at 50/65/75GHz

V Band 50-75GHz



Dimension:(unit in mm)

