

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

Caution:

Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required or the amplifier may be damaged.

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.

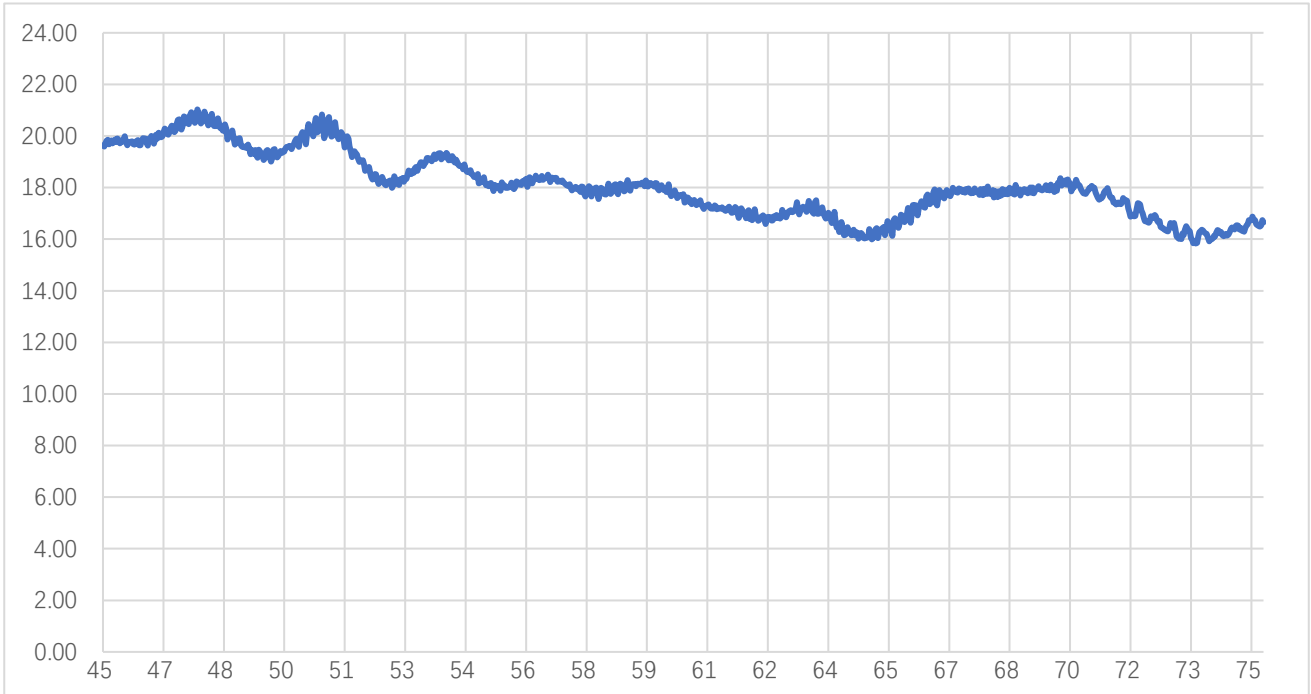




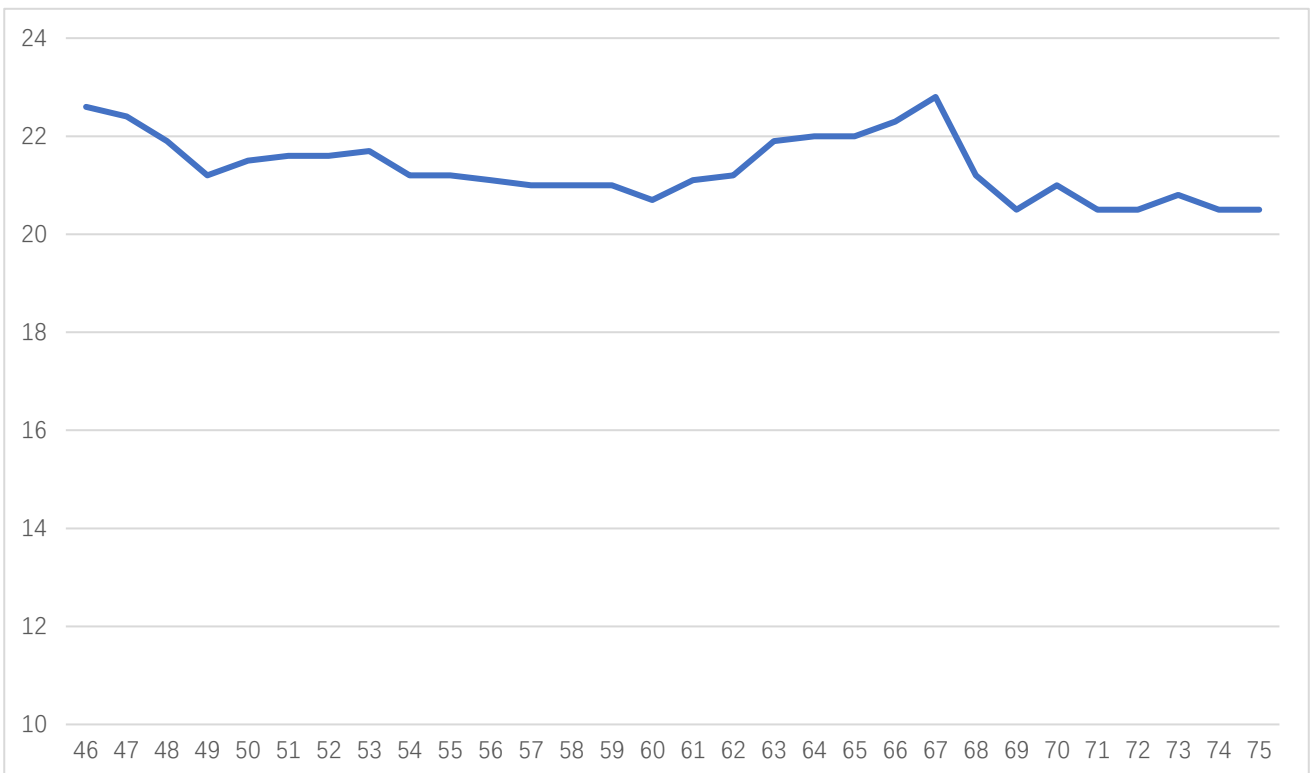
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Test Data:

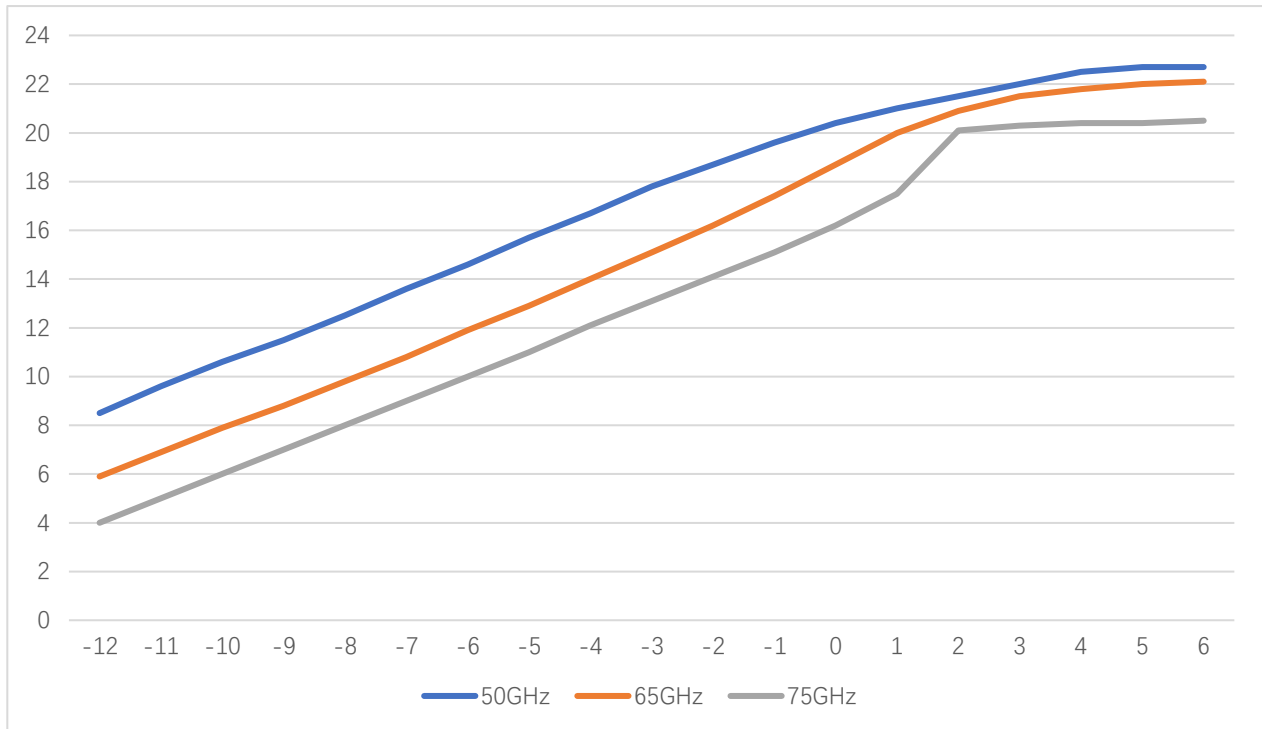


Gain vs Frequency



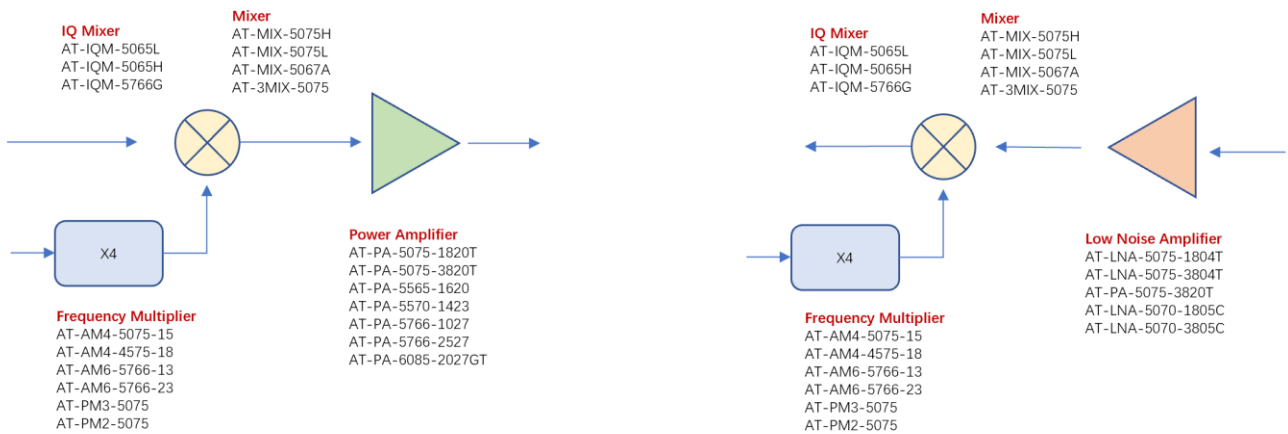
Psat vs Frequency





Pout vs Pin at 50/65/75GHz

V Band 50-75GHz



Dimension:(unit in mm)

