

### 37-67GHz Broadband Power Amplifier



#### Product Overview

AT-PA-3767-2720VC is high power amplifier with +20dBm output power in the frequency of 37-67GHz. The DC power requirement is +5V/500mA. The module is with 1.85mm Female. This amplifier is with very low NF=6dB, which can also be used as low noise amplifier.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

#### Advantages

- ✓ Frequency: 37-67GHz
- ✓ P1/Psat:+18/20dBm
- ✓ Small signal gain: 27dB
- ✓ NF=6dB
- ✓ Single Power Supply

#### Application

- ✓ U Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ Microwave Point to Point

#### Key Features

Parameter	Min	Typical	Max
Frequency		37-67GHz	
Gain (37-65GHz)	24dB	27dB	
P1dB		+18dBm	
Psat		+20dBm	
NF		6dB	
Drain Supply		+5V	+8V
Current		500 mA	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





# AT-PA-3767-2720VC

37-67GHz Medium Power Amplifier

## Mechanical Information

Item	Description
Input Port	1.85mm Female
Output Port	1.85mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	90g
Size:	27x27x14 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+8dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

### Caution:

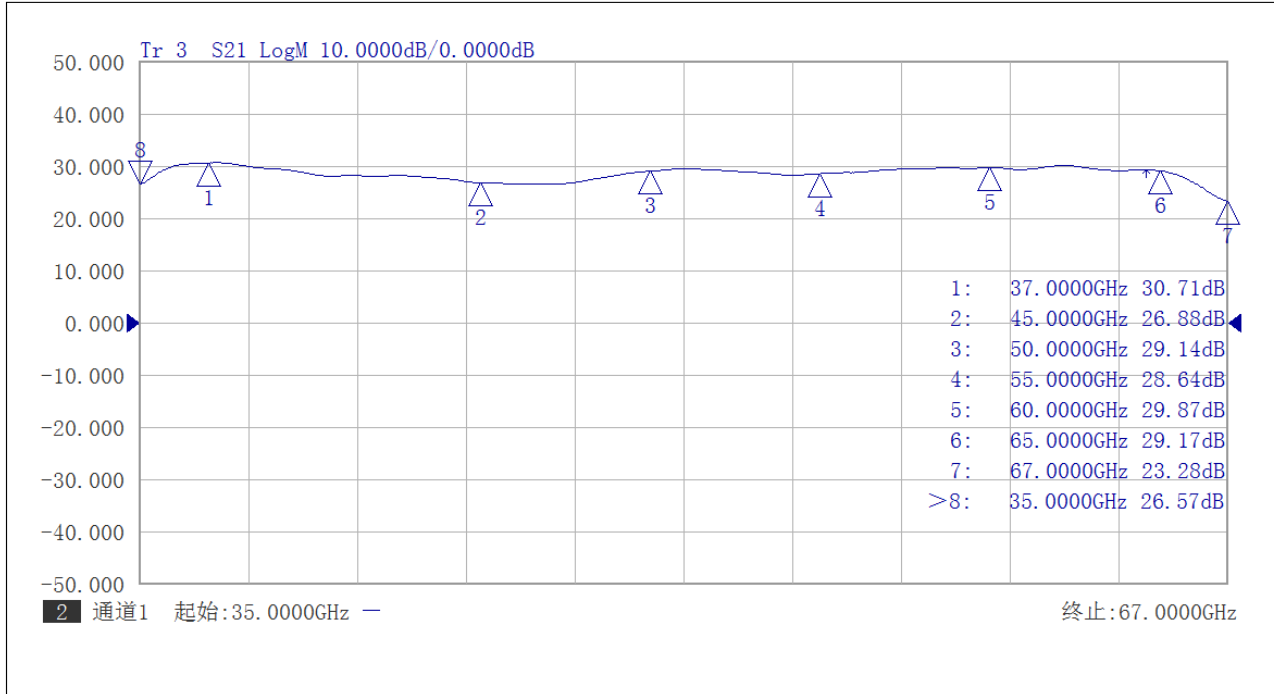
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

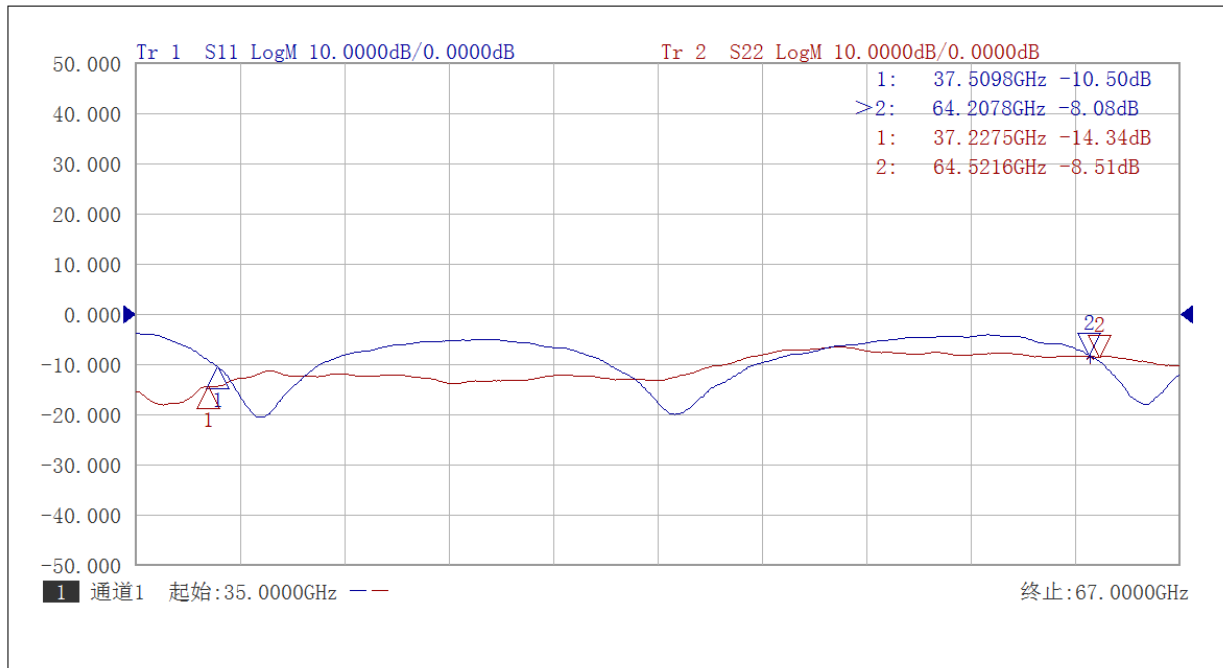
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data:



Gain vs Frequency



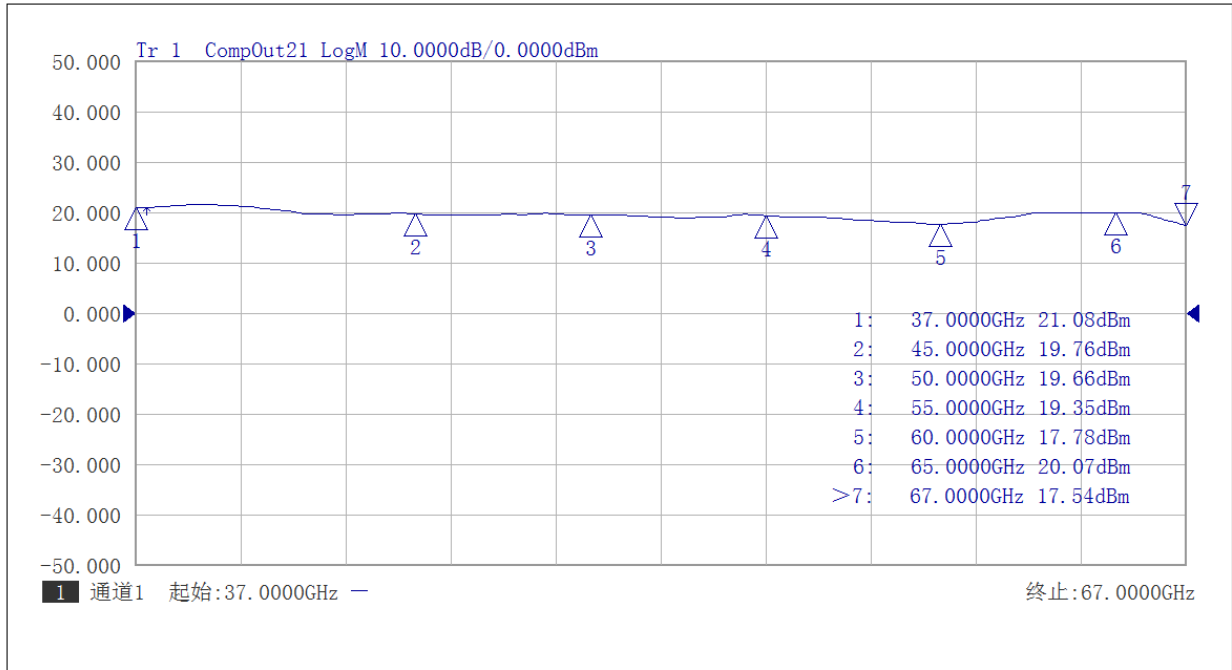
Input and Output Return Loss



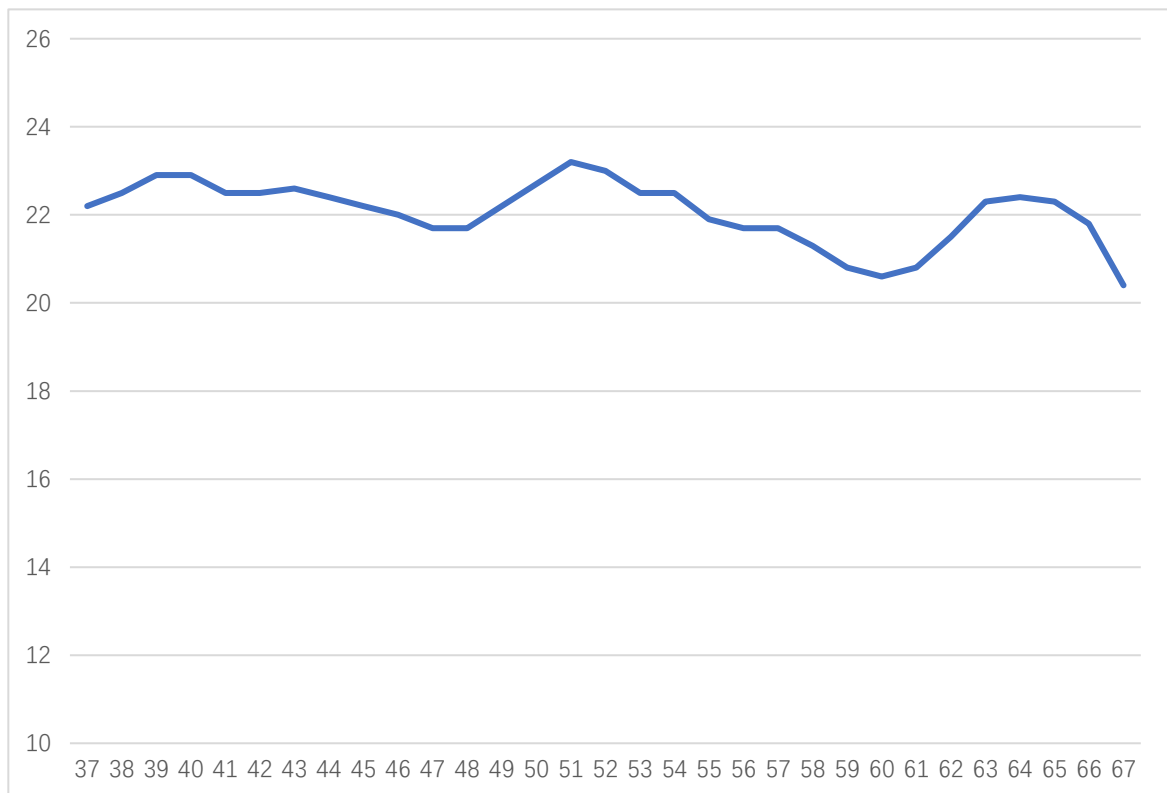


# AT-PA-3767-2720VC

## 37-67GHz Medium Power Amplifier



P1dB vs Frequency



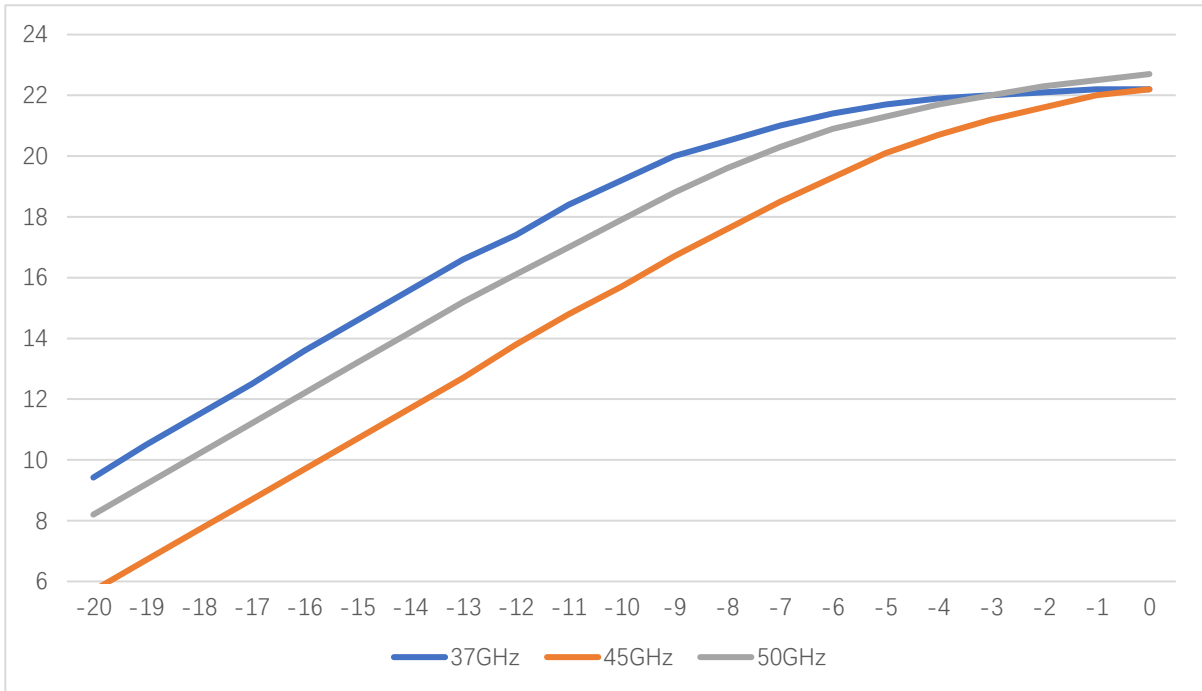
PSAT vs Frequency





# AT-PA-3767-2720VC

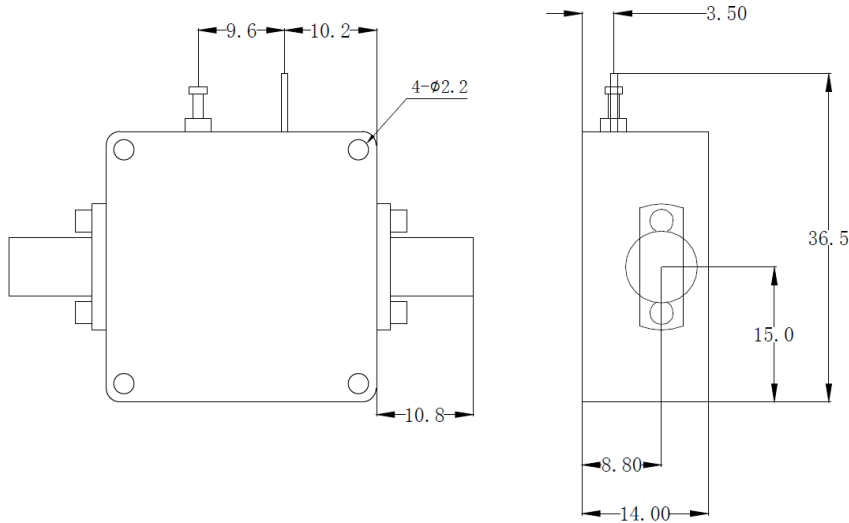
37-67GHz Medium Power Amplifier



Pout vs Pin at 37/45/50GHz

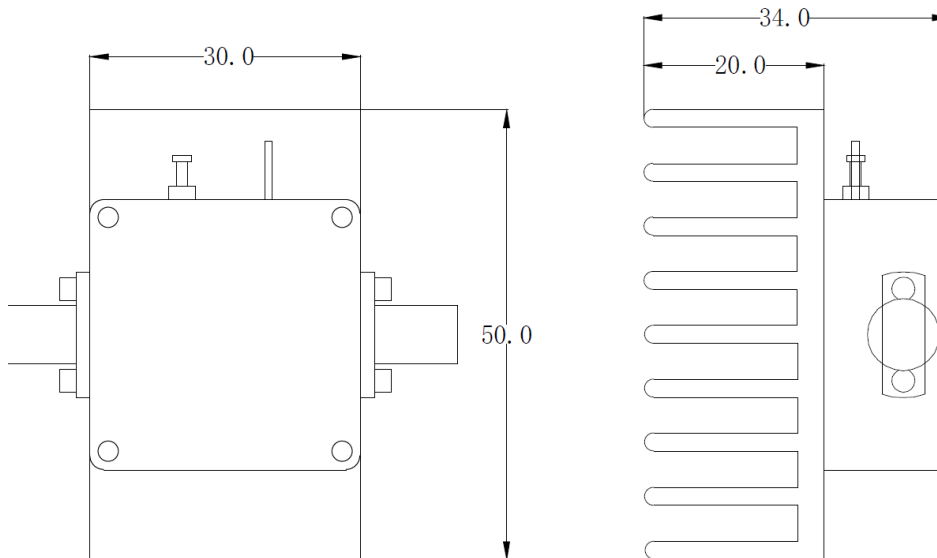


### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.



Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

**Heat Sink Required During Operation**

