

### 100MHz-22GHz Broadband Amplifier

2023-5-5



#### Product Overview

AT-PA-0022-2730A is broadband amplifier from 100MHz-22GHz, with  $P_{out}=+30dBm$ . The DC power requirement is +16V/800mA. The module is with SMA Female.

The high power makes it suitable for many applications. The broadband amplifier has high gain, high linearity, low input/output return loss and flat gain response. Bench-top test equipment type with 110-240V power supply is available according to request.

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

#### Advantages

- ✓ Frequency: 100MHz-22GHz
- ✓  $P_{sat}$ : +30dBm
- ✓ Small signal gain: 27dB
- ✓ Single Power Supply

#### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

#### Key Features

Parameter	Min	Typical	Max
Frequency		100MHz-22GHz	
Gain	25dB 23dB	0.1-18GHz: 27dB 18-22GHz: 25dB	
P1dB		+29dBm	
$P_{sat}$	+27dBm	+30dBm	
Drain Supply		+16V	+17
Current		800 mA	950mA
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





# AT-BB-0022-2730A

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## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	150g
Size:	SEE OUTLINE

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+18V
RF Input Power	+10 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

### 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.

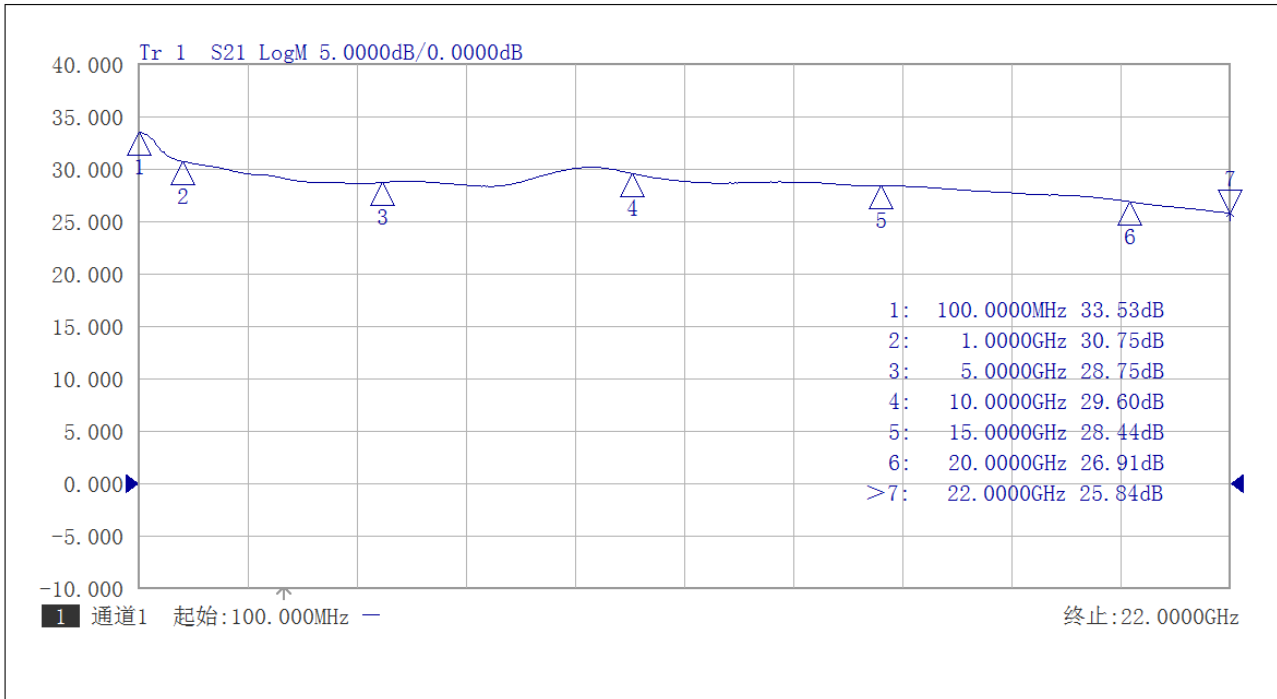
## Notes:

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.

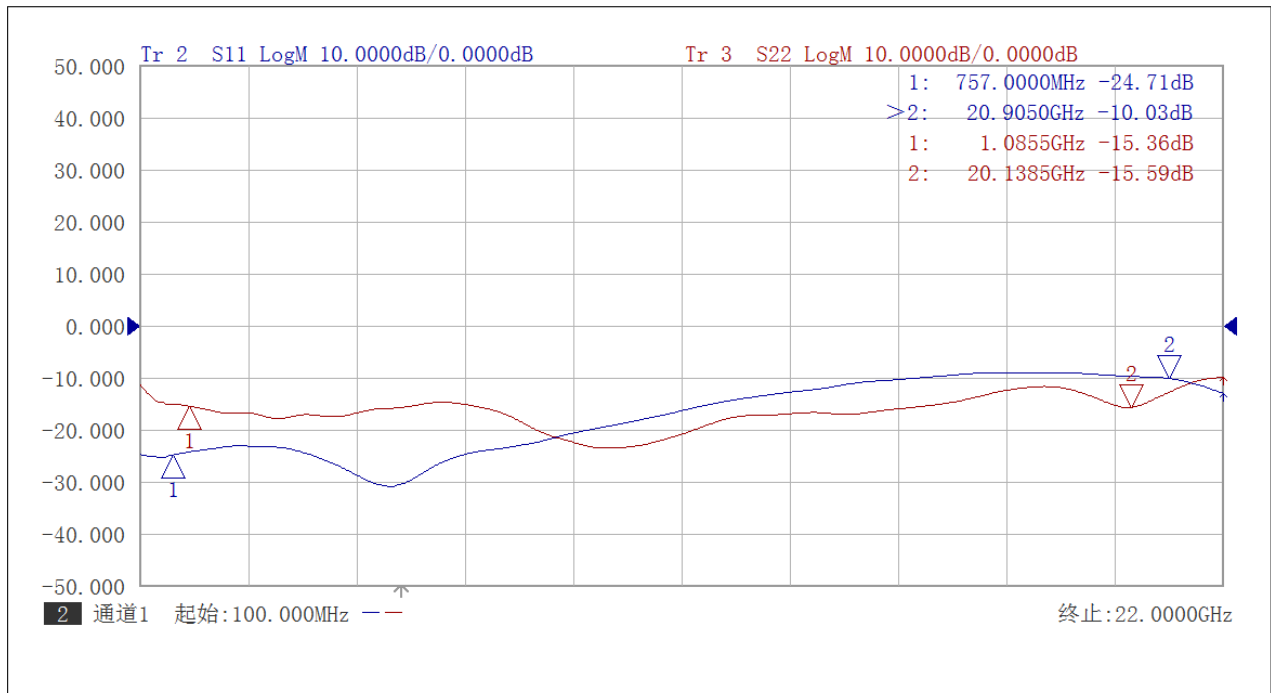


### Test Data (25C)

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



Gain vs Frequency



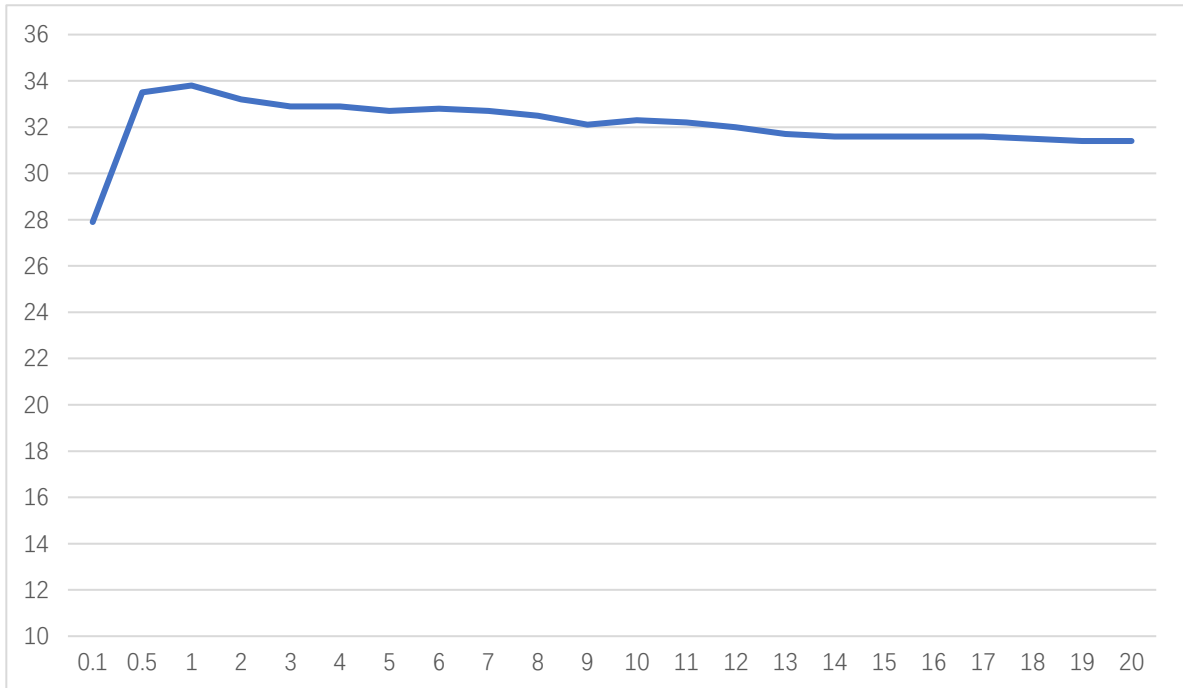
Return Loss vs Frequency



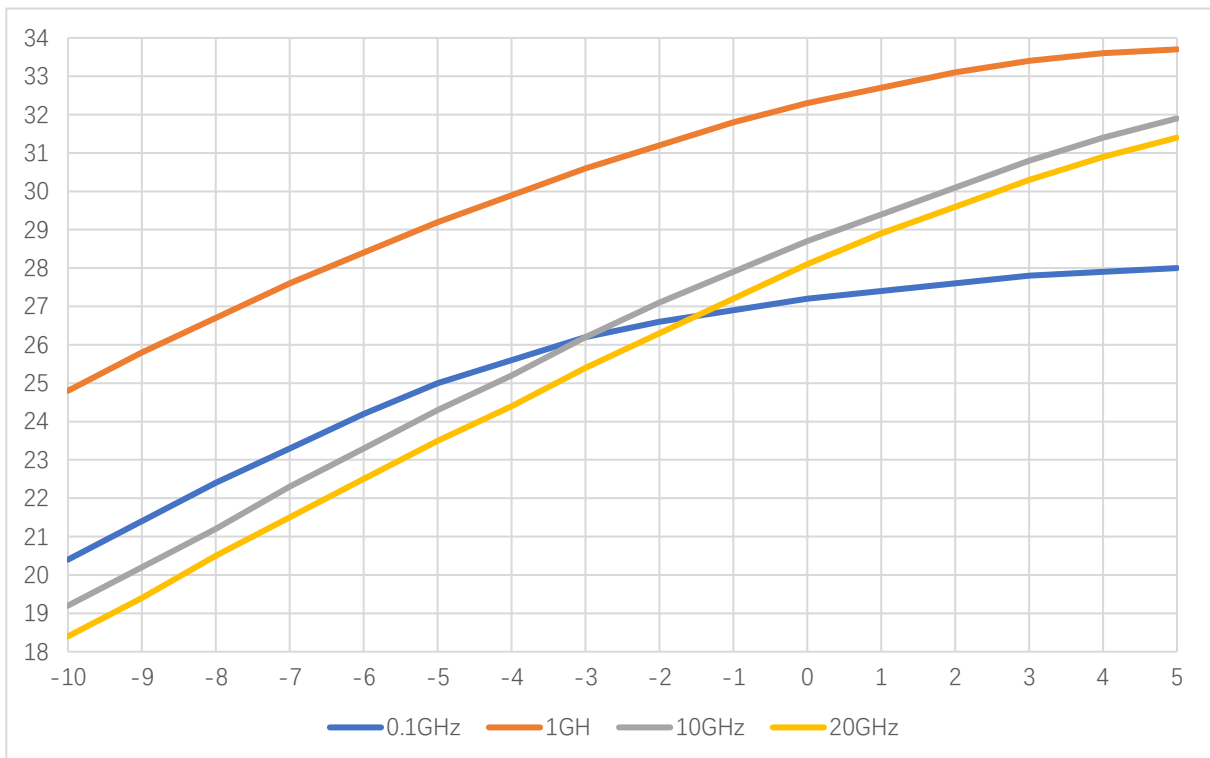


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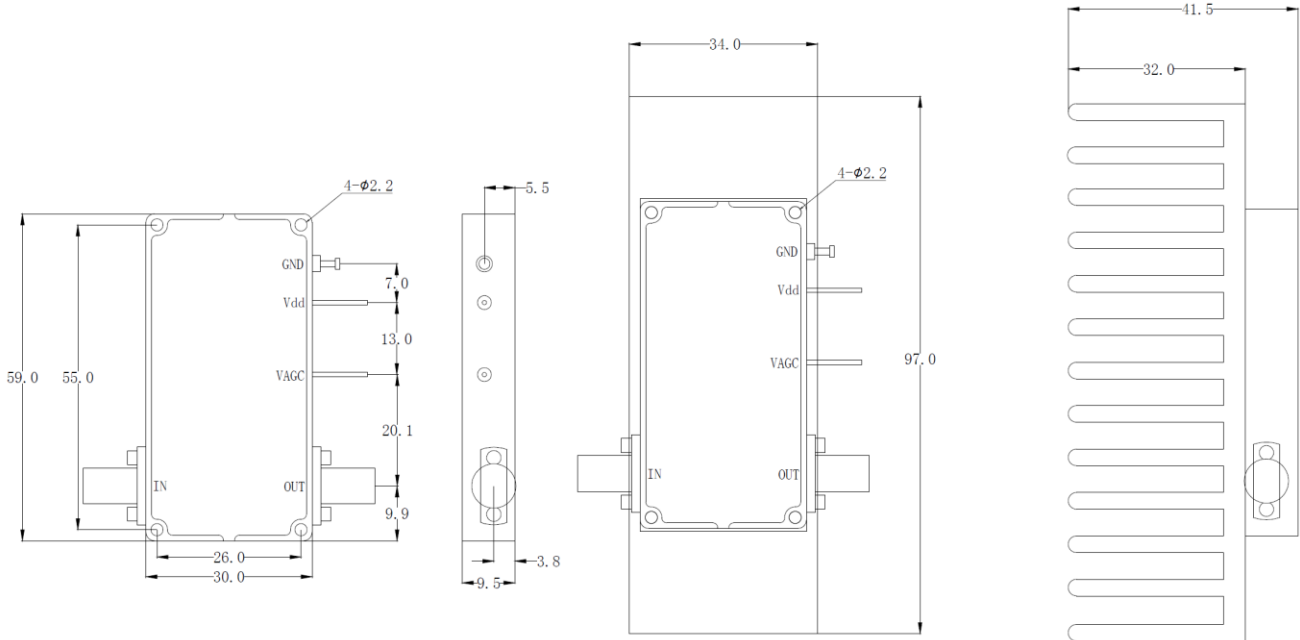
Psat vs Frequency



Pout vs Pin at 0.1/1/10/20GHz



**Dimension:** (unit in mm)



**Heat Sink Required During Operation**

