

100MHz-22GHz Broadband Amplifier

2022-9-1



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

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:	59x30x9.5 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+18V
RF Input Power	+10 dBm
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.

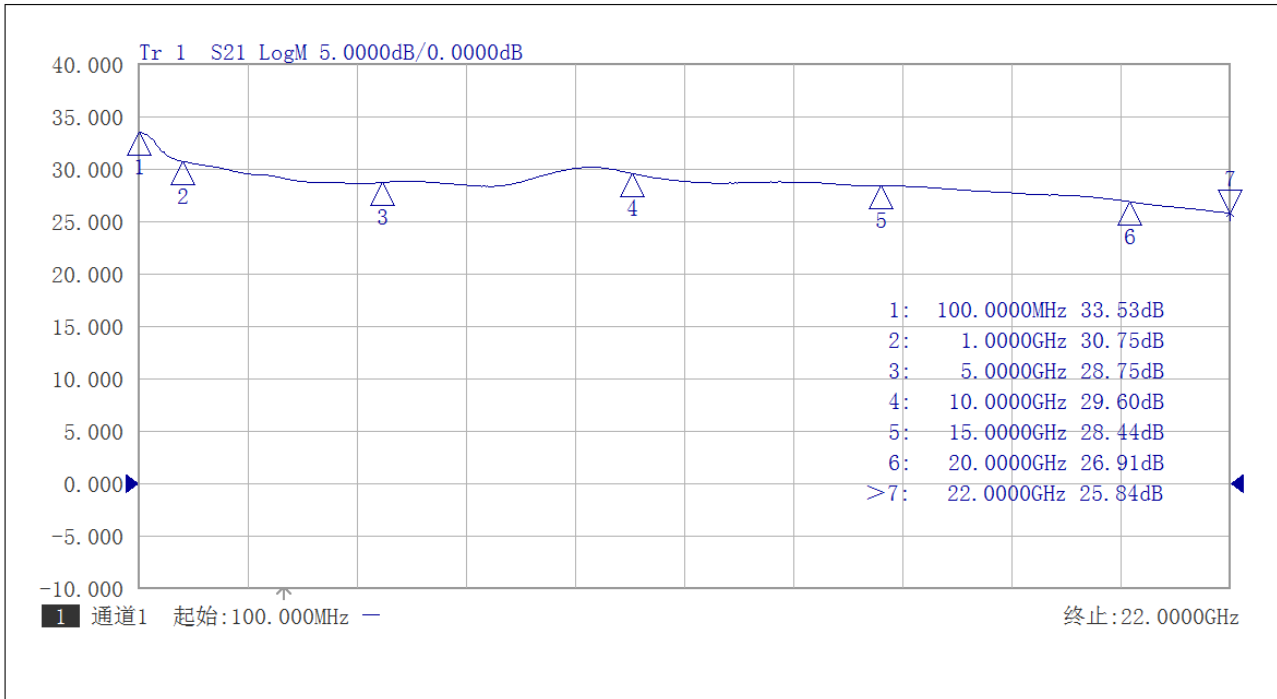
Notes:

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.

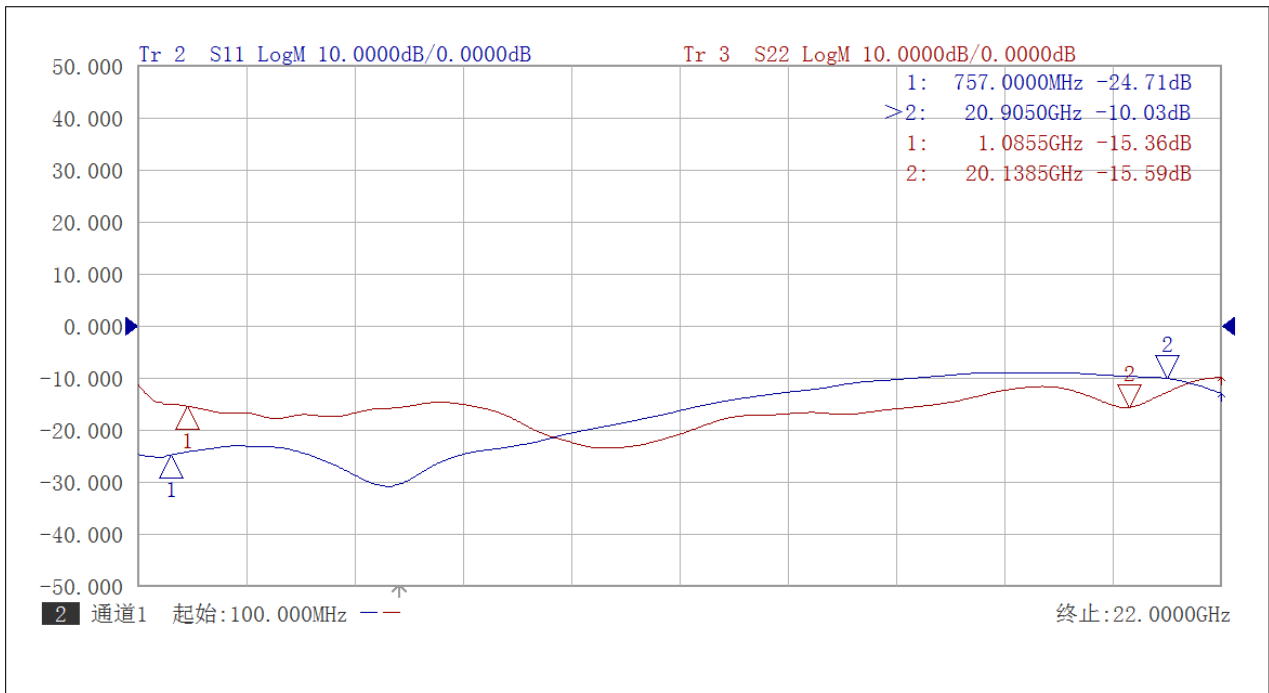


Test Data (25C)

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



Gain vs Frequency



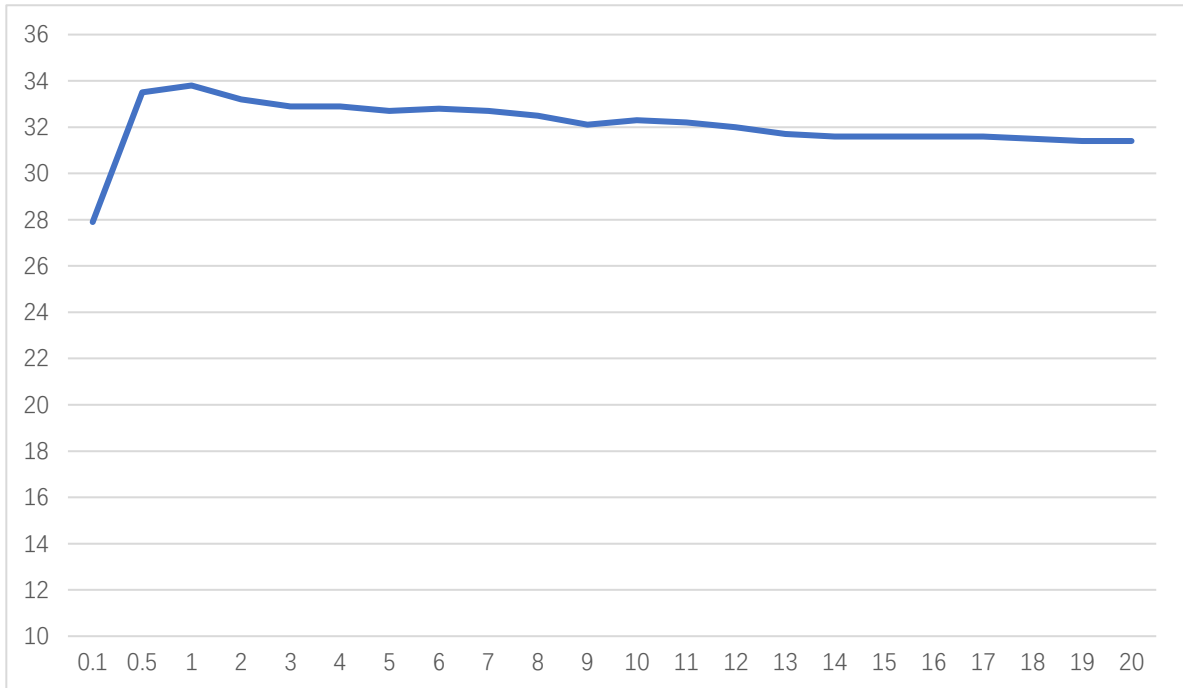
Return Loss vs Frequency



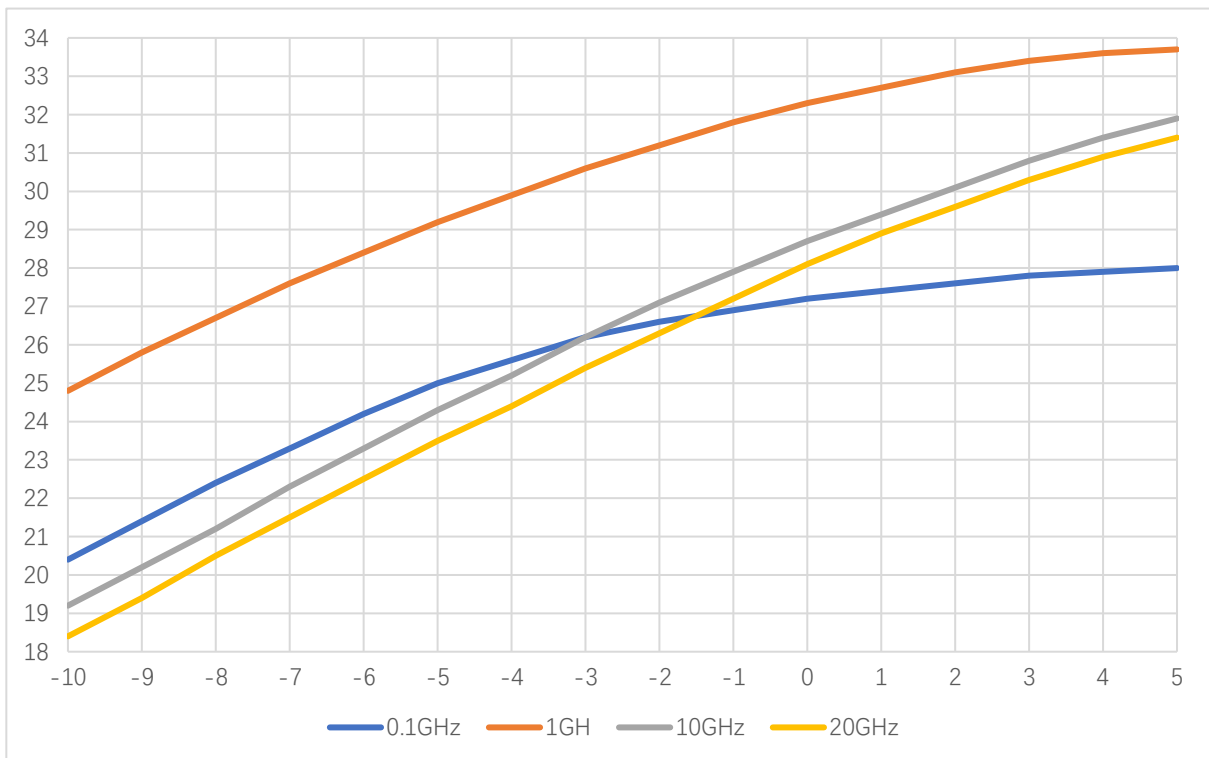


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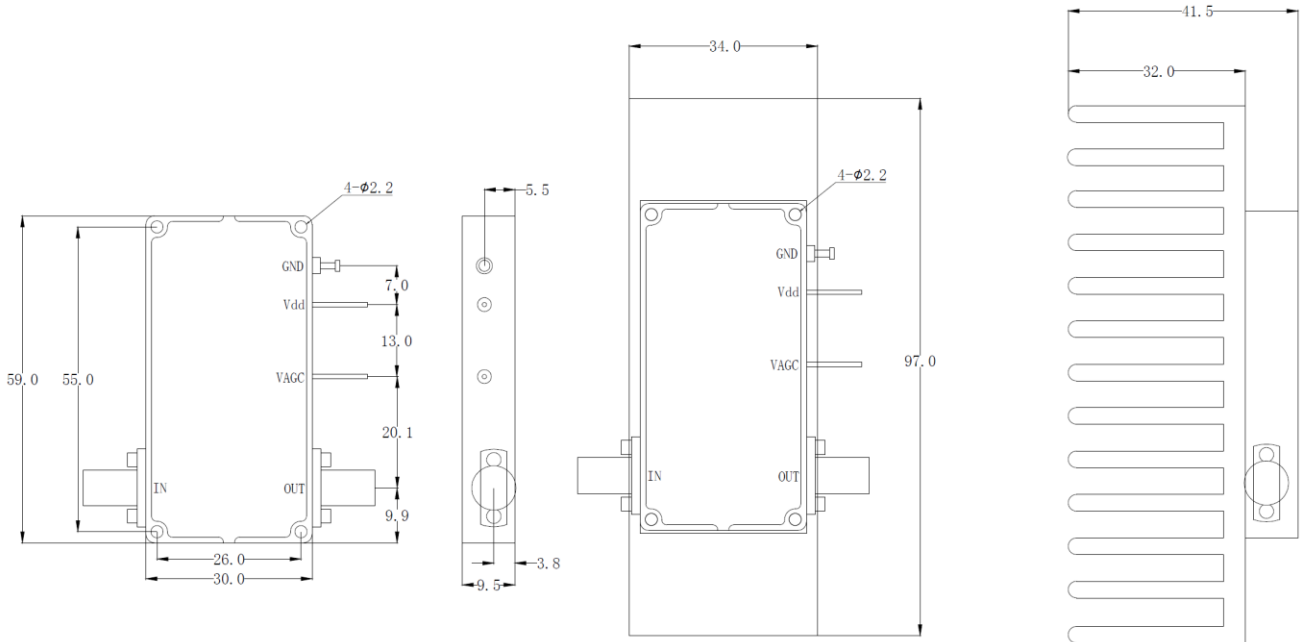
Psat vs Frequency



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



Dimension: (unit in mm)



Heat Sink Required During Operation

