

2-18GHz, Low NF Broadband Amplifier

Gain=23dB, Pout=+27dBm , NF=2.3dB



Product Overview

AT-PA-0218-2327XC is broadband amplifier from 2-18GHz, with Pout=+27dBm, NF=2.3dB. It can be used both as Power amplifier and low noise amplifier. The DC power requirement is +10V/550mA. The module is with SMA Female

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: 2-18GHz
- ✓ Psat:+27dBm
- ✓ Small signal gain: 23dB
- ✓ NF=2.3dB

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		2-18GHz	
Gain	22dB	23dB	
P1dB	+24dBm +23dBm	2-12GHz: +26dBm 12-18GHz: +25dBm	
Psat	+25dBm +24dBm	2-12GHz: +27dBm 12-18GHz: +26dBm	
Drain Supply		+10V	+12V
Idd NO RF		0.4A	
IDD at Psat		0.51A	0.65A
NF		2.3dB	3dB
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





AT-PA-0218-2327XC

2-18GHz Broadband Amplifier

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)	90g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+15V
RF Input Power	+15 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

Caution:

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

Bias Procedure:

Make sure GND is connected before Vdd Power ON.

Module may be damaged when Vdd Power ON without GND.

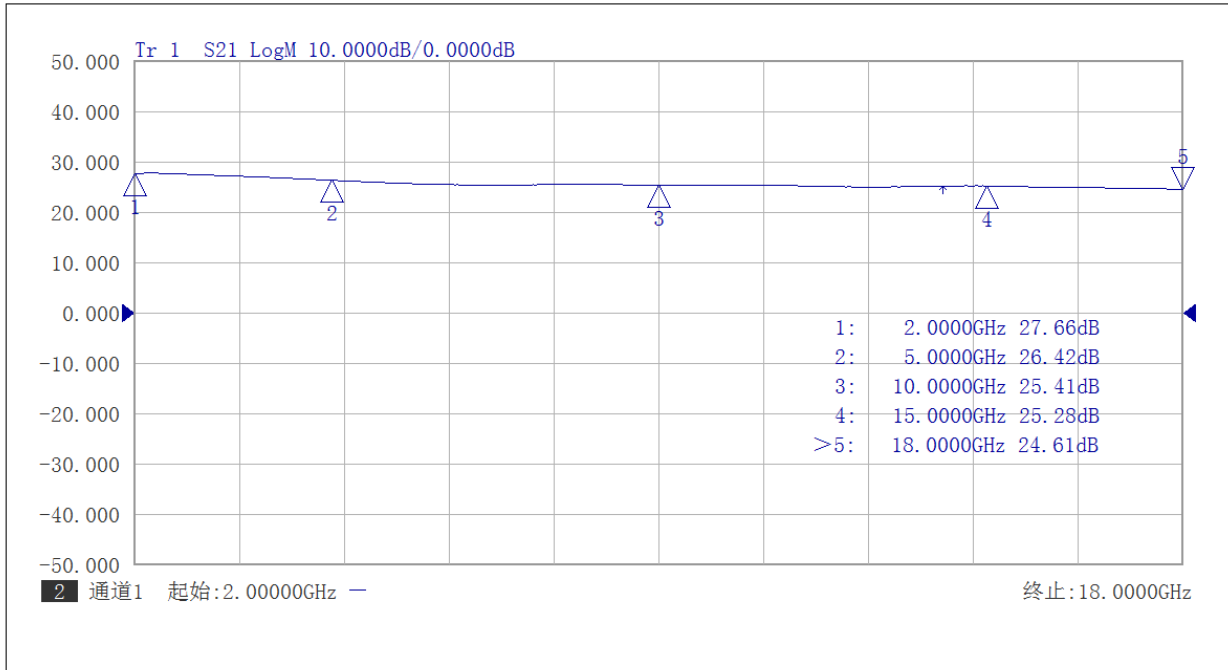
Notes:

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.

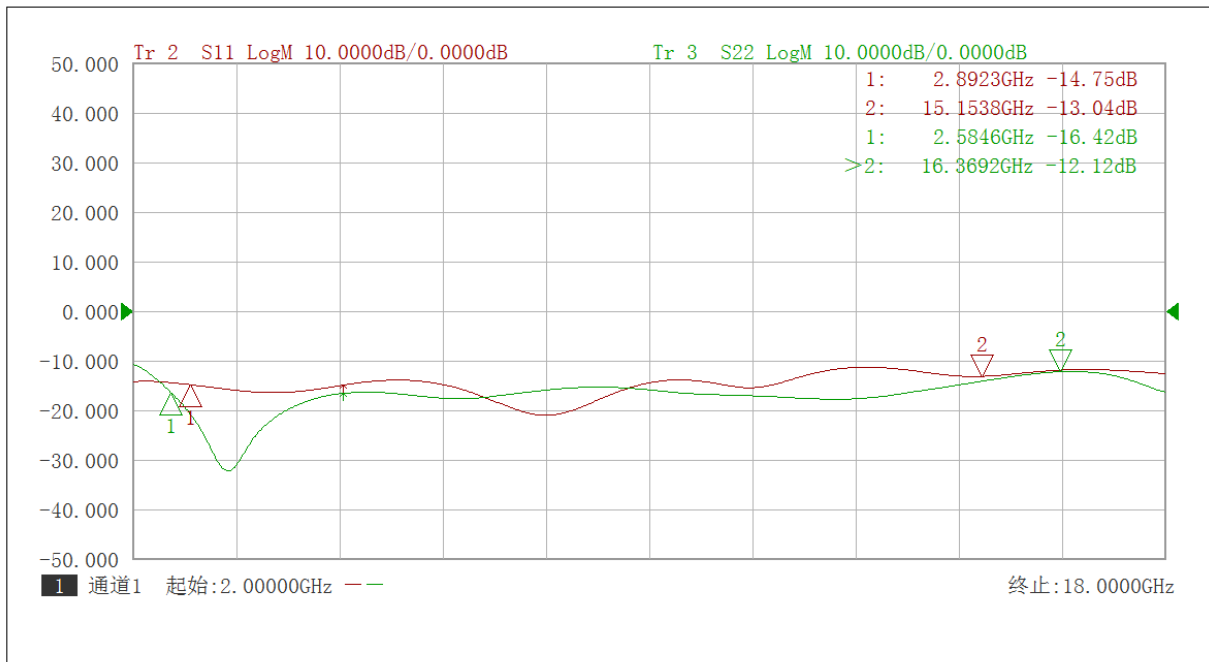


Test Data (25C)

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



Gain vs Frequency



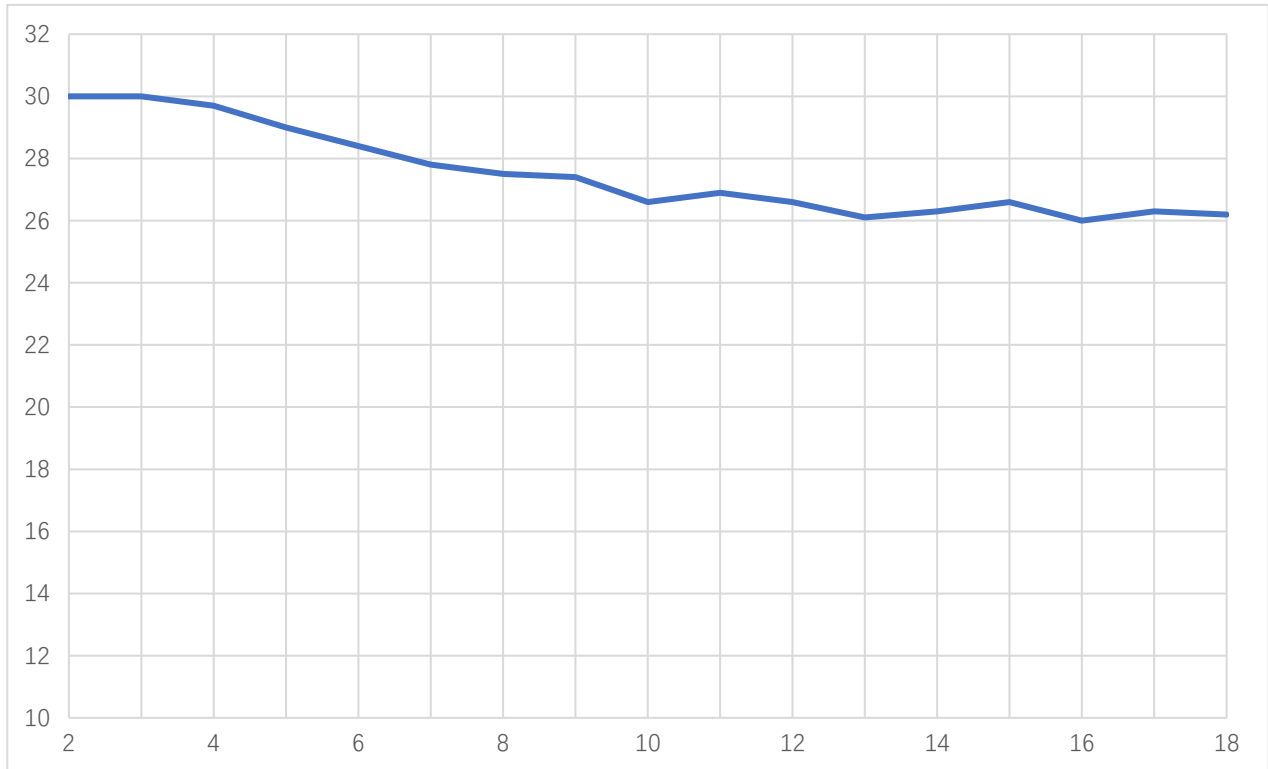
Return Loss vs Frequency



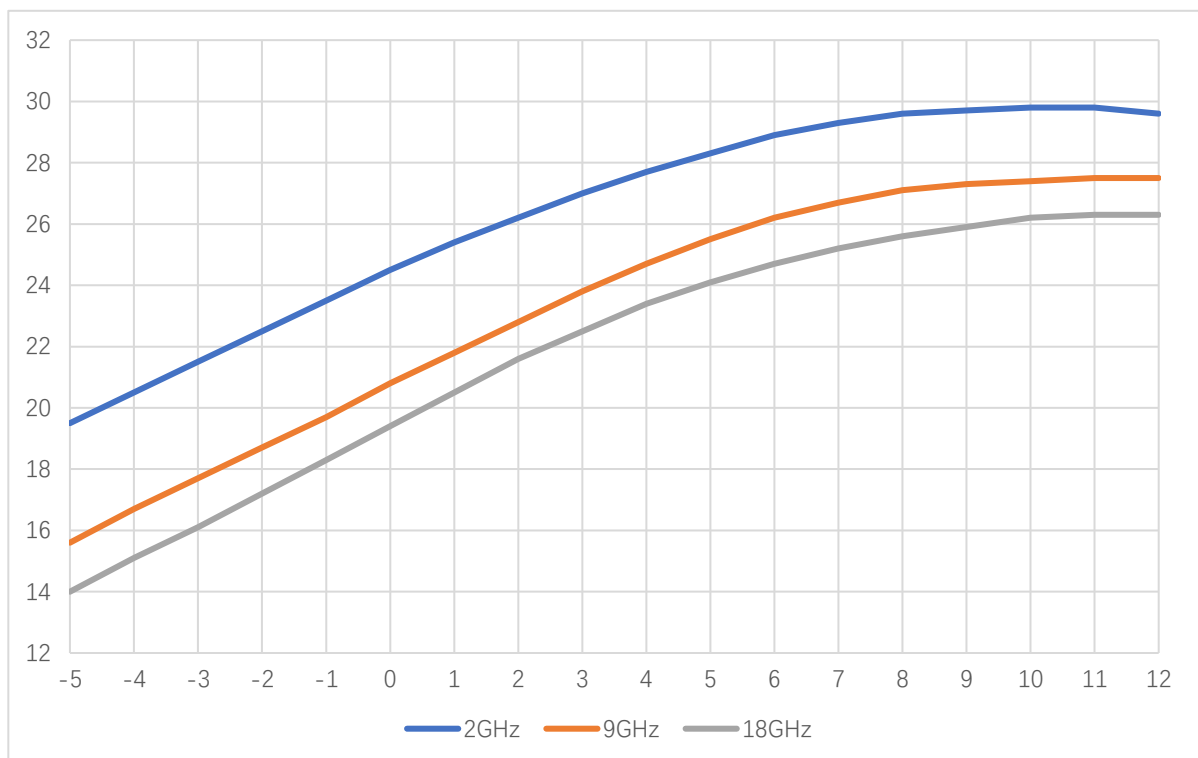


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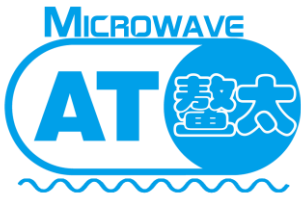


Psat vs Frequency



Pout vs Pin at 2/9/18GHz

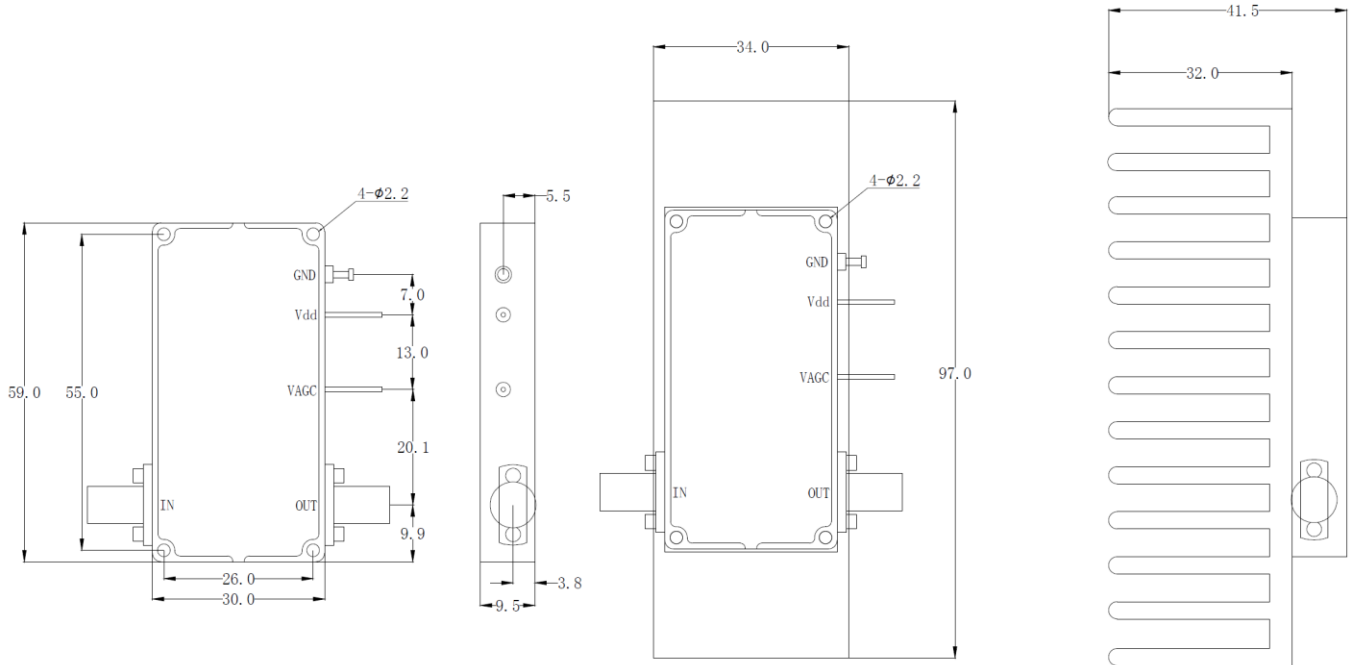




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Dimension: (unit in mm)



Heat Sink Required During Operation

