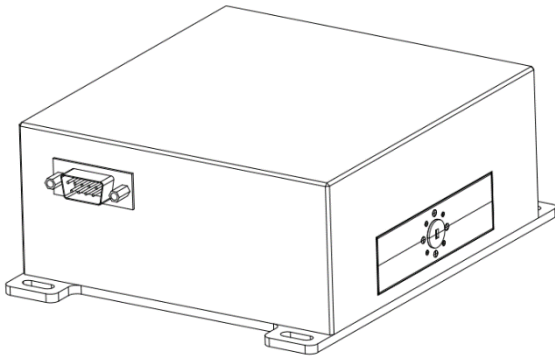


# AT-CPA-9098-3830G2

90-98GHz Power Amplifier, Psat=+30dBm

## W Band High Power Amplifier, Gain=38dB , Psat +30dBm, WR-10



### Product Overview

AT-PA-9098-3830G2 is 10dB high gain power amplifier with +30dBm output power in the frequency of 90-98GHz. The DC power requirement is +5V/8.8A. The module is with a standard WR-10 waveguide. GaAs amplifier chips are used inside for high linearity.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. It can also be used from 85-100GHz with some variation of performance.

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

### Advantages

- ✓ Frequency: 90-98GHz
- ✓ P1=+28dBm
- ✓ Psat:+30dBm
- ✓ Small signal gain: 38dB

### Application

- ✓ W band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Key Features

Parameter	Min	Typical	Max
Frequency		90-98GHz	
Small Signal Gain	35dB	38dB	
Output P1	+27dBm	+28dBm	
Output Saturated Power	+29dBm	+30dBm	
Supply Voltage	+4.5V	+5V	+5.5V
Quiescent Current/A (No RF)		6.5A	
Psat Current/A		8.5A	11A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	

Shanghai AT Microwave Limited

Tel:021-6229 1233

Email: [sales@atmicrowave.com](mailto:sales@atmicrowave.com)

[www.atmicrowave.com](http://www.atmicrowave.com)





# AT-CPA-9098-3830G2

90-98GHz Power Amplifier,  $P_{sat}=+30dBm$

## Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Power Supply	DB9
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	TBD
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
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 exceeds 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.



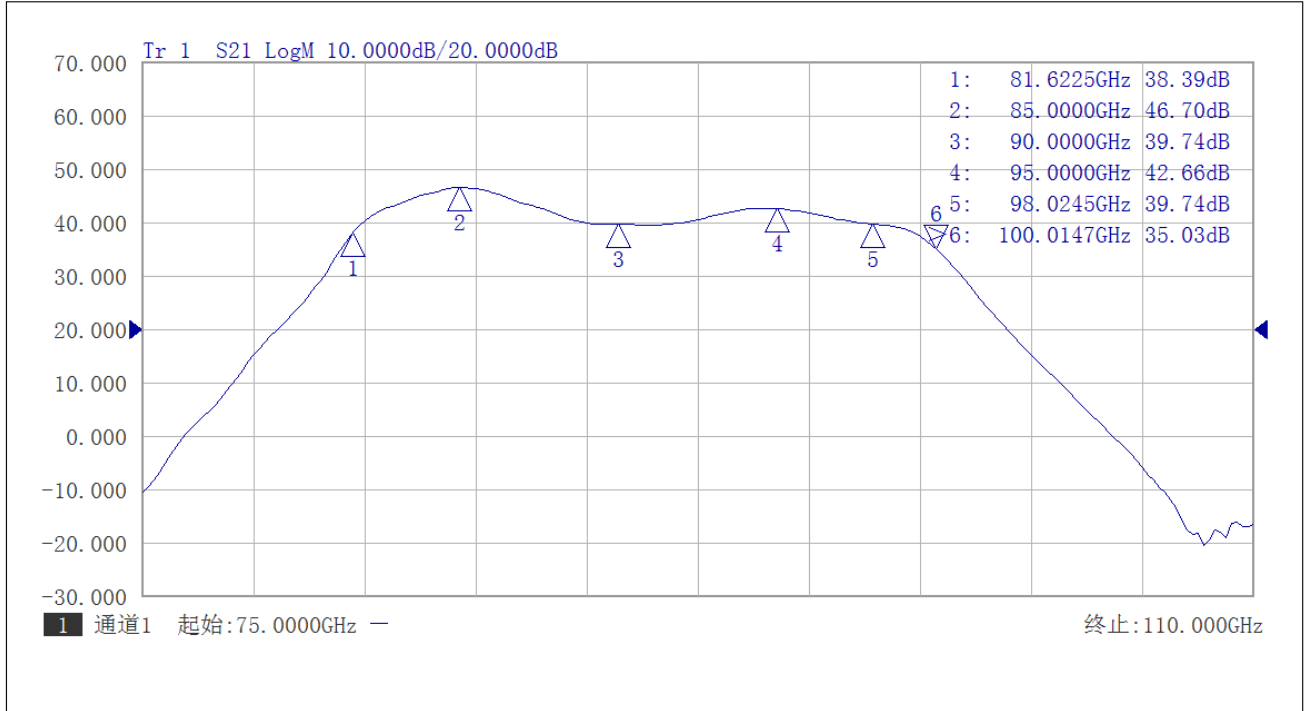


# AT-CPA-9098-3830G2

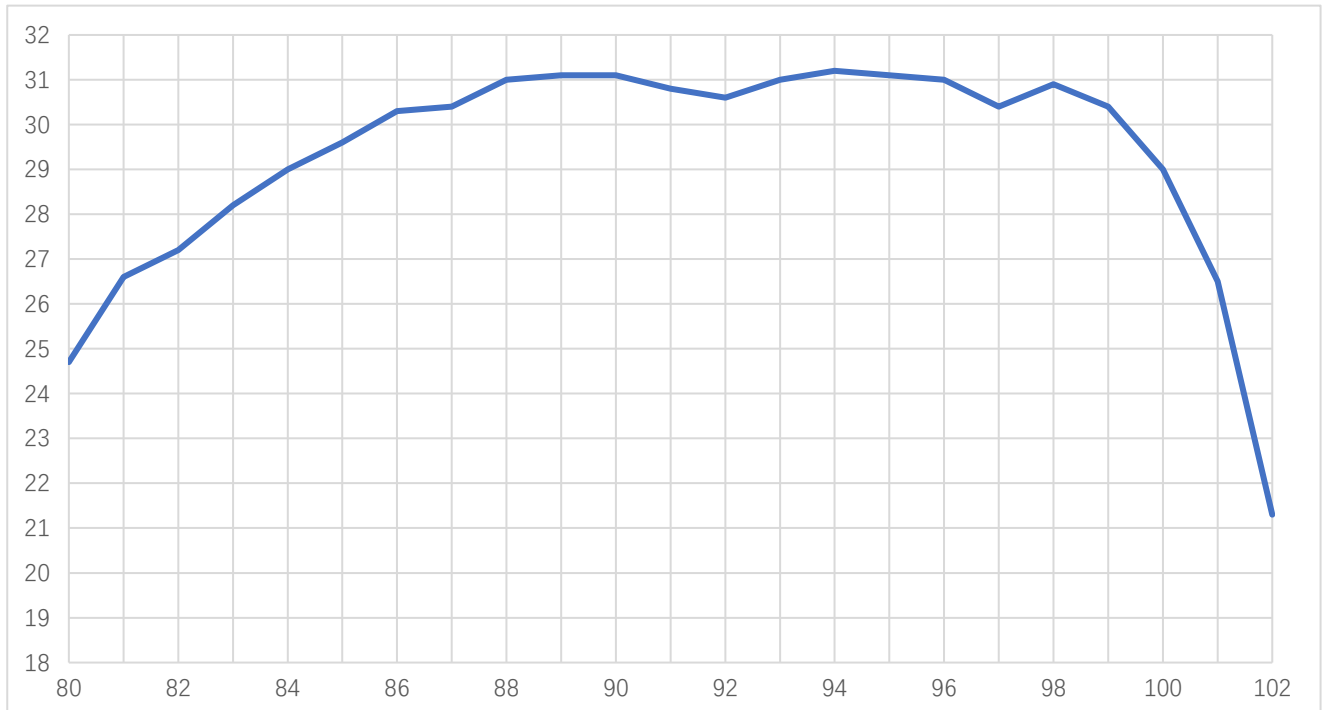
90-98GHz Power Amplifier, Psat=+30dBm

## Test Data (25C)

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



Gain vs Frequency



Psat vs Frequency

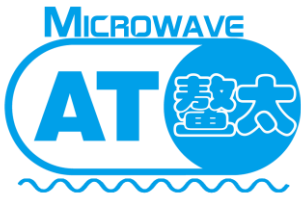
Shanghai AT Microwave Limited

Tel:021-6229 1233

Email: sales@atmicrowave.com

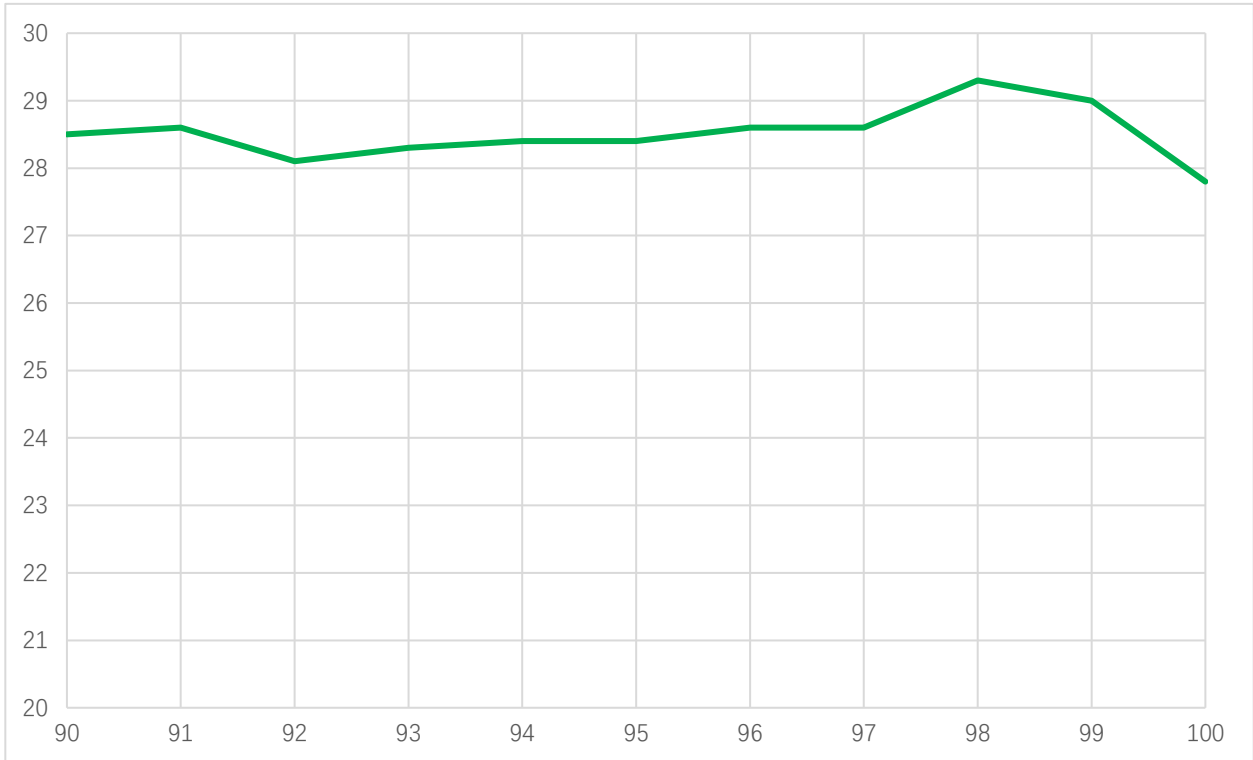
www.atmicrowave.com



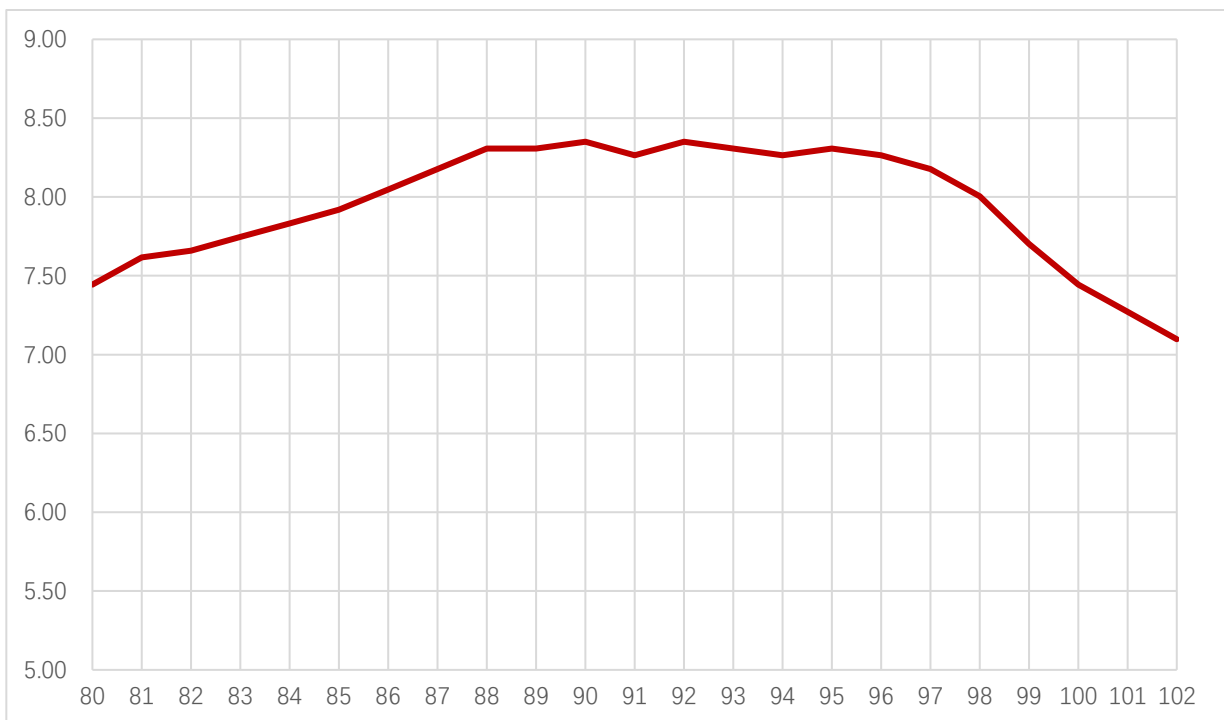


# AT-CPA-9098-3830G2

90-98GHz Power Amplifier,  $P_{sat}=+30dBm$



P1db vs Frequency



IDD at Psat, Vdd=+5V

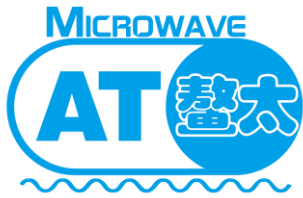
Shanghai AT Microwave Limited

Tel:021-6229 1233

Email: sales@atmicrowave.com

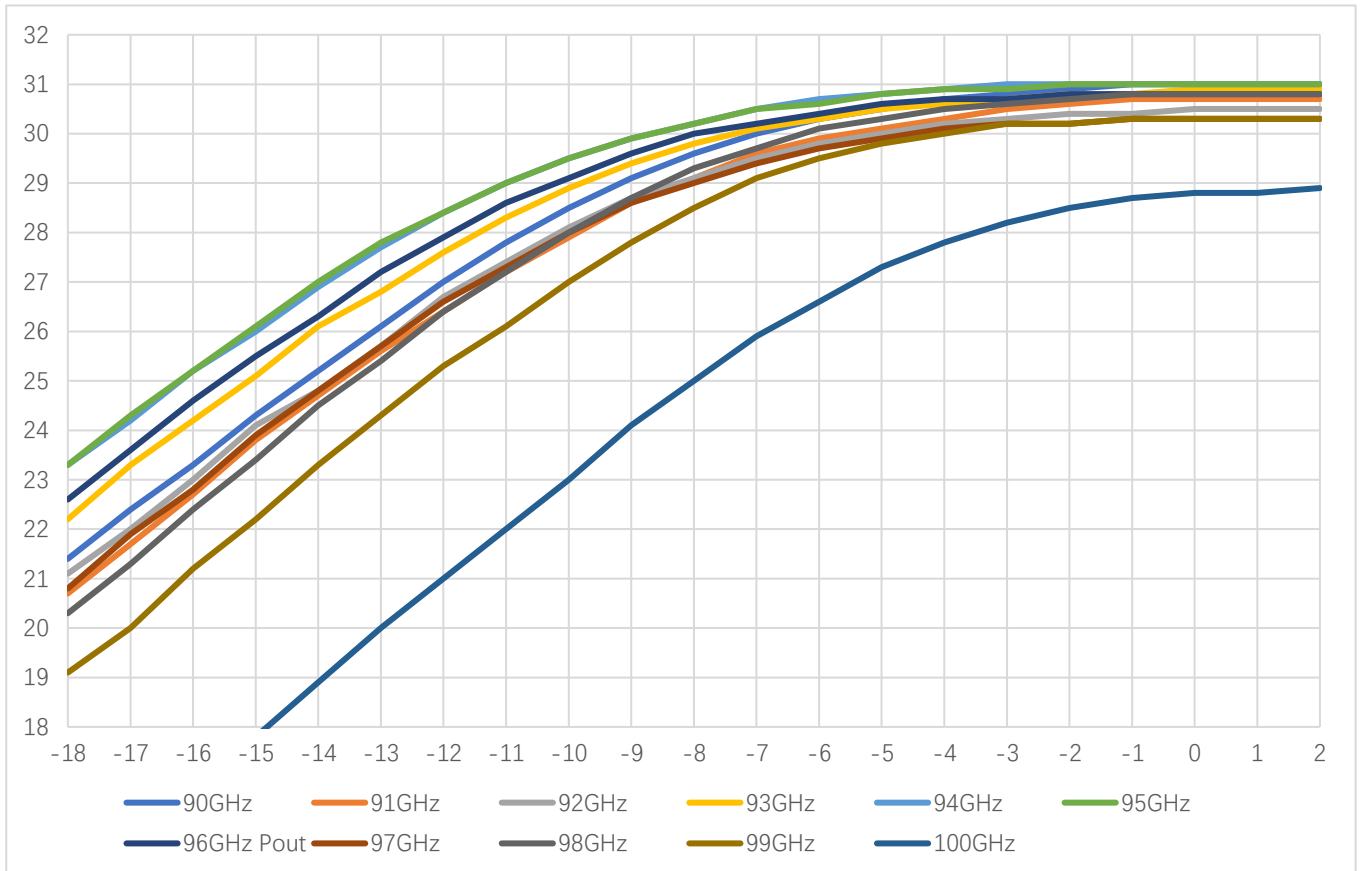
www.atmicrowave.com





# AT-CPA-9098-3830G2

90-98GHz Power Amplifier,  $P_{sat}=+30dBm$



Psat vs Pin

