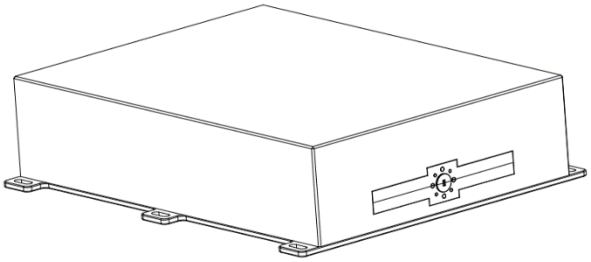
AT-CPA-9098-3832G3

90-98GHz Power Amplifier, Psat=+32dBm

W Band High Linear Power Amplifier, Gain=38dB , Psat +32dBm, WR-10



Product Overview

AT-CPA-9098-3832G3 is 38dB high gain power amplifier with +32dBm output power in the frequency of 90-98GHz. The DC power requirement is +5V/15A. The module is with a standard WR-10 waveguide. GaAs amplifier chips are used inside.

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

Advantages

- ✓ Frequency: 90-98GHz
- ✓ P1=+30dBm
- ✓ Psat:+32dBm
- ✓ 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	+29dBm	+30dBm	
Output Saturated Power	+31dBm	+32dBm	
Supply Voltage （V）		+5V	+6V
Quiescent Current/A (No RF)		12.5A	
Psat Current/A		15A	22A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	

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Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
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	+12dBm
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.

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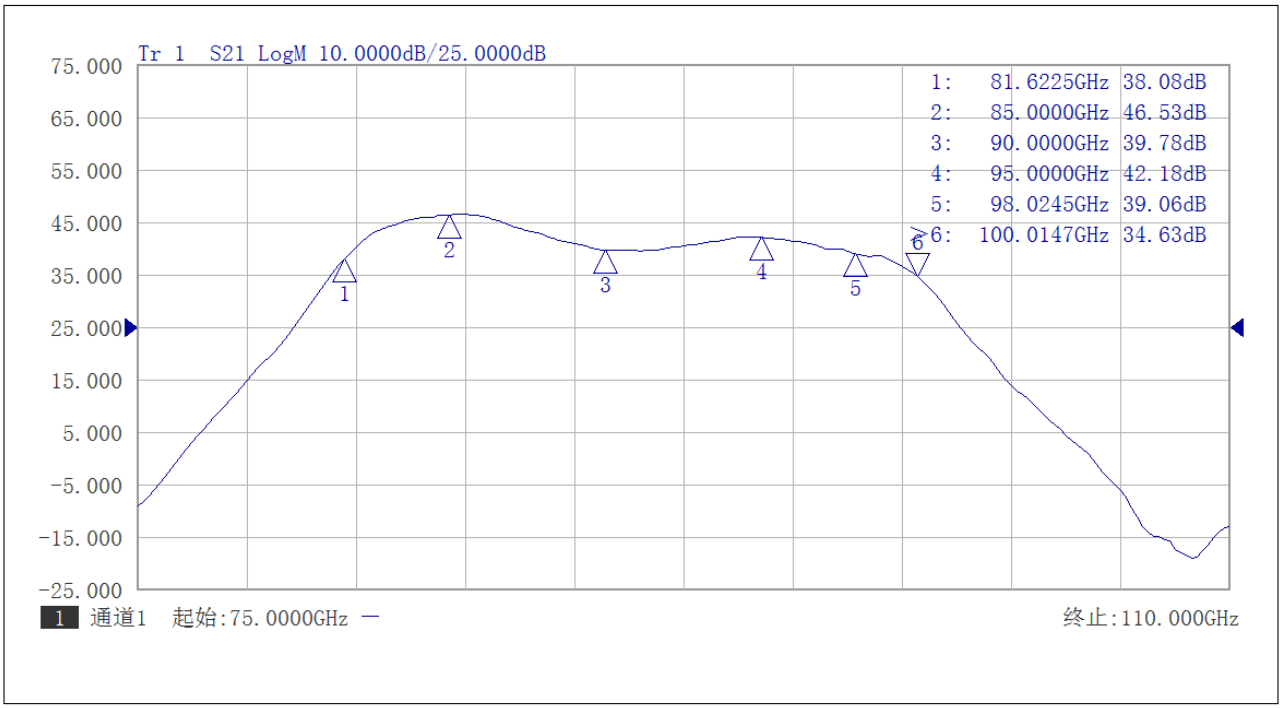
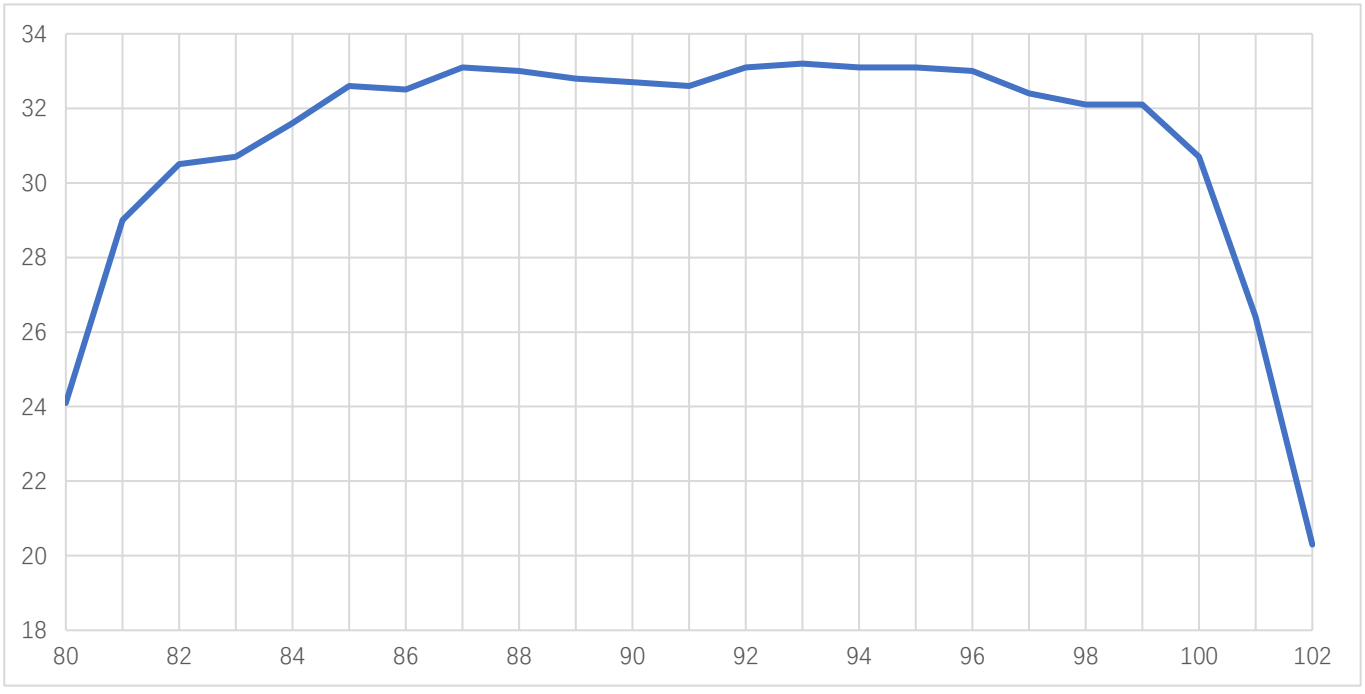
Test Data (25C)

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



Gain vs Frequency



Psat vs Frequency, Pin=+10dBm

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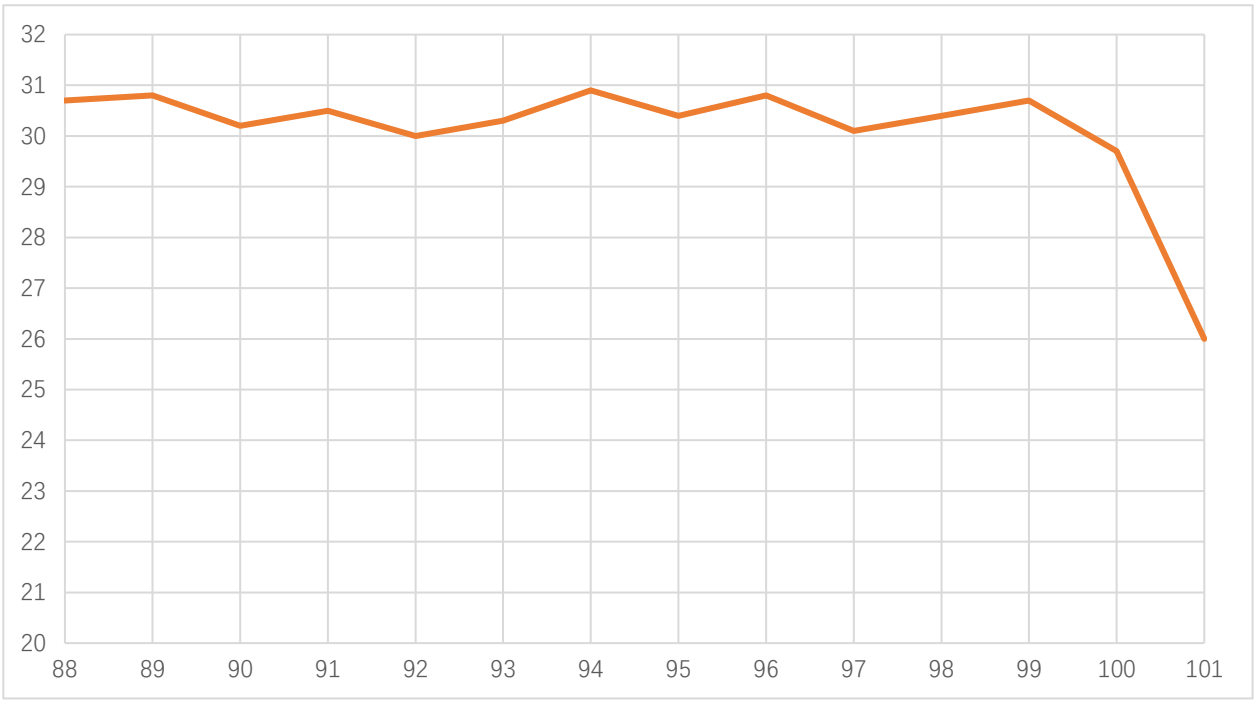
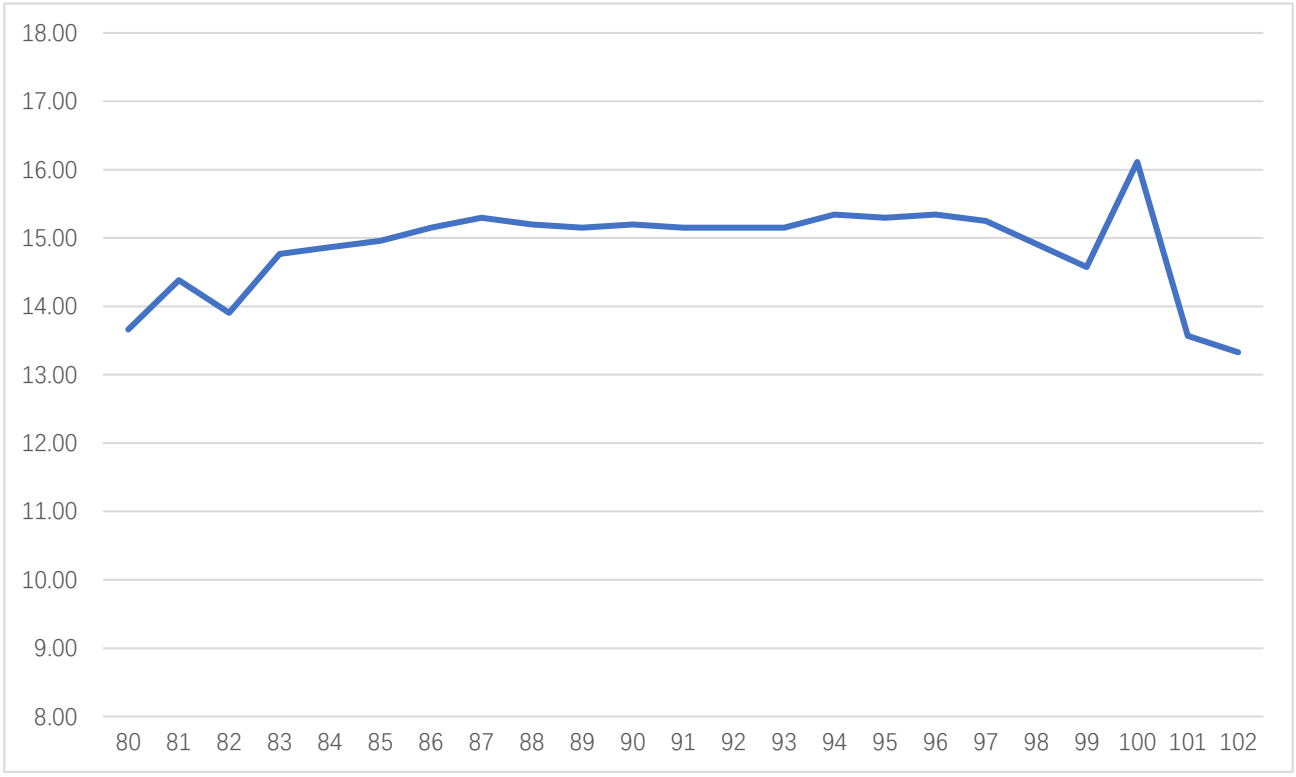


P1dB vs Frequency



IDD at Psat, Vdd=+5V

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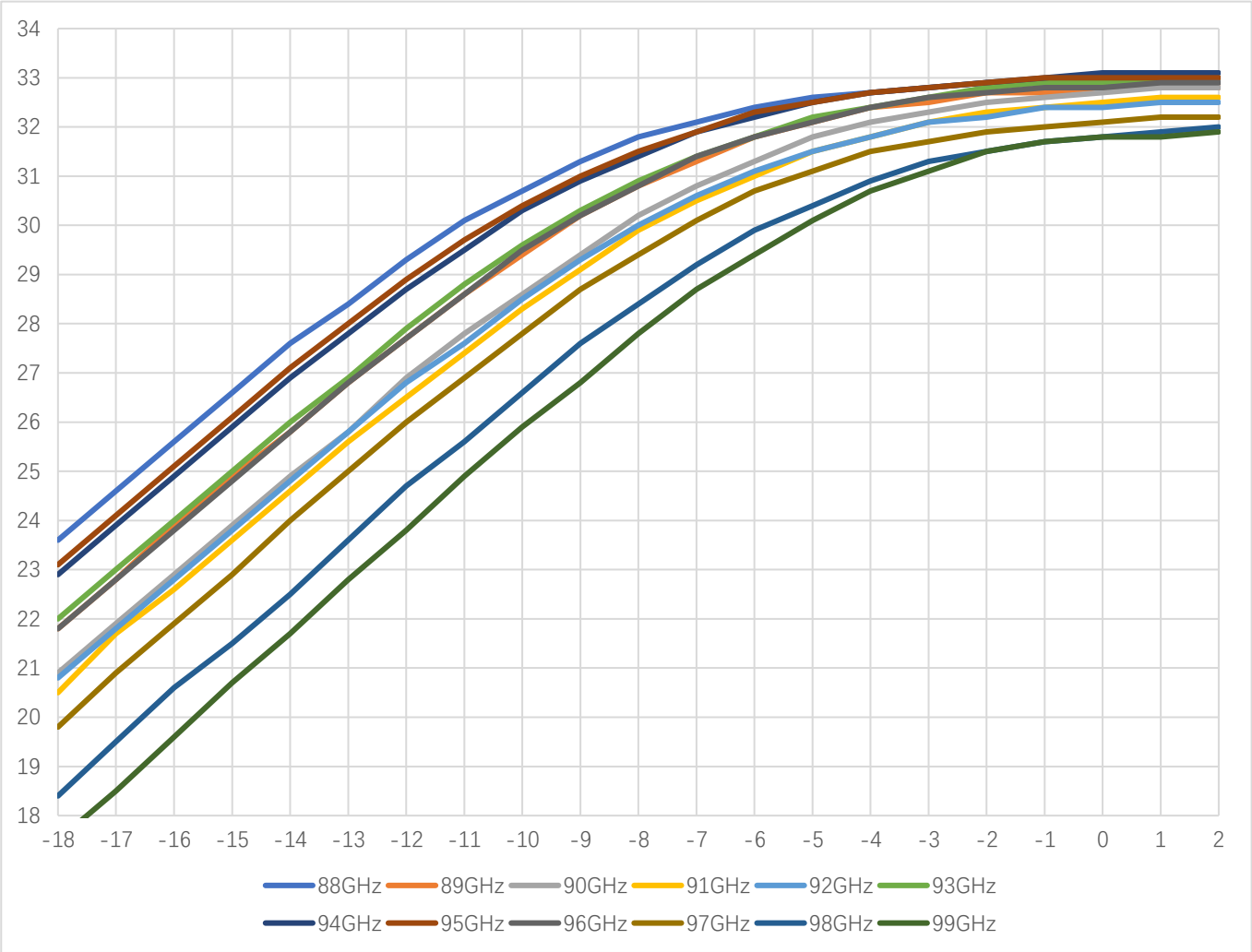

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