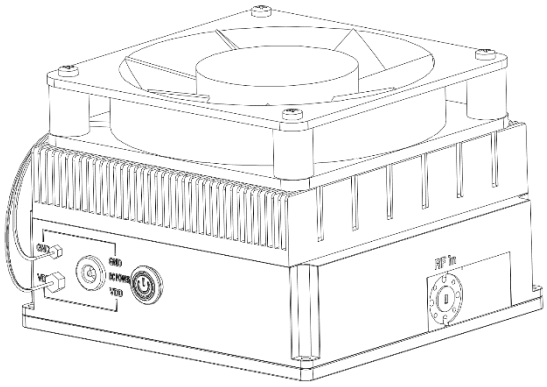
AT-CPA-7078-3533G2

70-78GHz Power Amplifier, Psat=+33dBm

E1 Band High Linear Power Amplifier, Gain=35dB , Psat +33dBm, WR-12

2023-9-28



Product Overview

AT-PA-7078-3533G2 is 35dB high gain power amplifier with +33dBm output power in the frequency of 70-78GHz. The DC power requirement is +24V/2.1A. The module is with a standard WR-12 waveguide. GaAs amplifier chips are used inside.

The power amplifier can also be used from 66-79GHz with some degrade of performance.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 70-78GHz
- ✓ P1=+32dBm
- ✓ Psat:+33dBm
- ✓ Small signal gain: 35dB

Application

- ✓ E1 Band Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		70-78GHz	
Small Signal Gain	33dB	35dB	
Output P1(71-76GHz)	+30dBm	+31dBm	
Saturated Power(71-76GHz)	+32dBm	+33dBm	
Supply Voltage		+24V	+28V
Quiescent Current/A		1.4A	
Psat Current/A		2.1A	2.5A
Fan Bias		+24V/0.2A	
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	

Shanghai AT Microwave Limited

Tel:021-6229 1233 Email: sales@atmicrowave.com www.atmicrowave.com

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Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Power Supply	2.1mm DC Jack, AC-DC Adapter included.
Case Material	Copper
Finish	Gold Plated
Weight(aprox)	2.8KG
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
AC Power Supply	90V TO 260V
DC Power Suppl	+28V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-45 to +85C

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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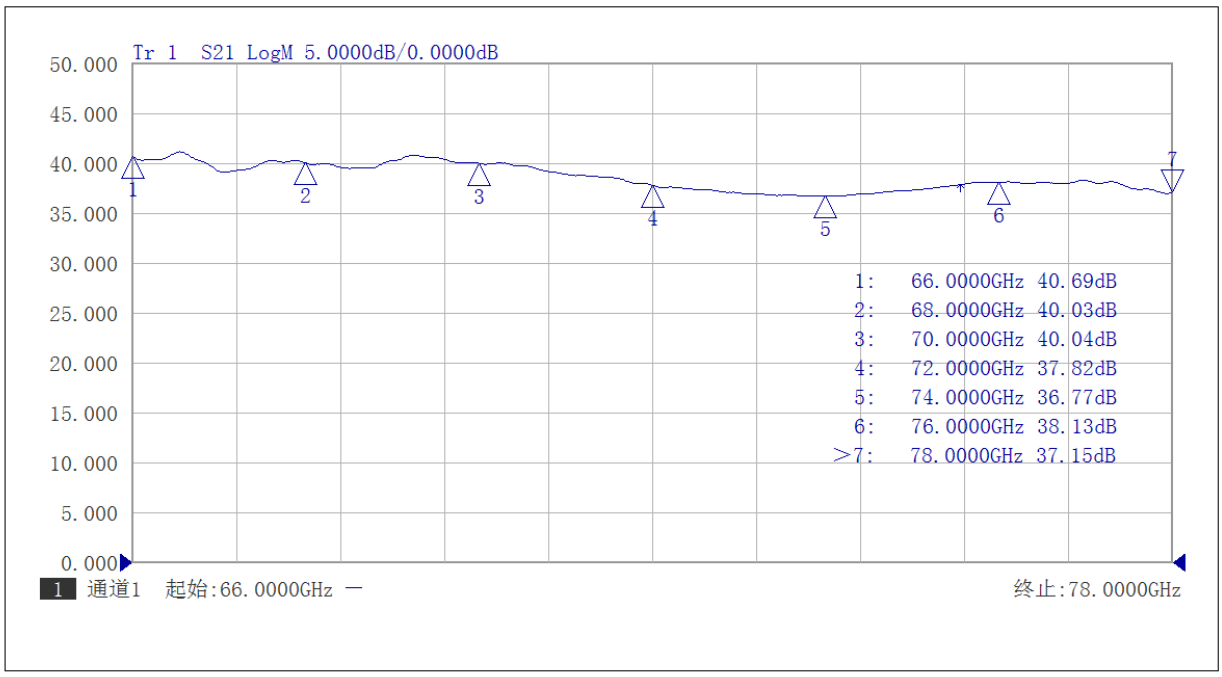
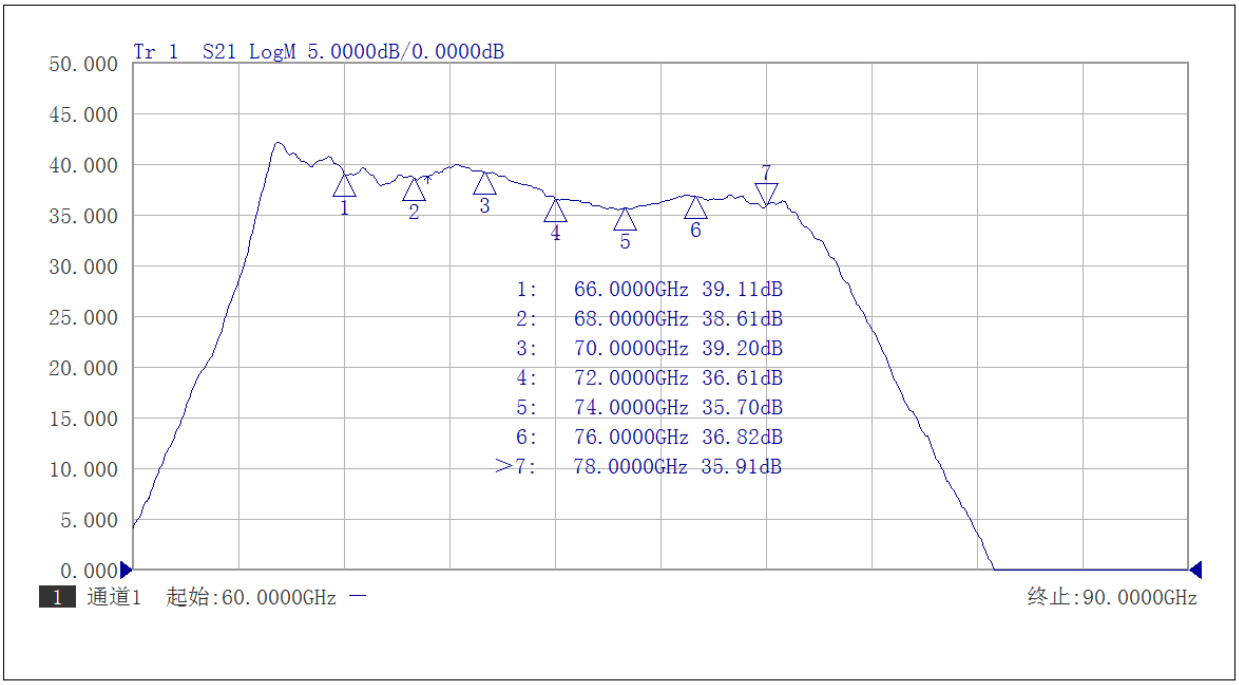
TEST DATA(25C)



Gain vs Frequency



Gain vs Frequency 60-90GHz

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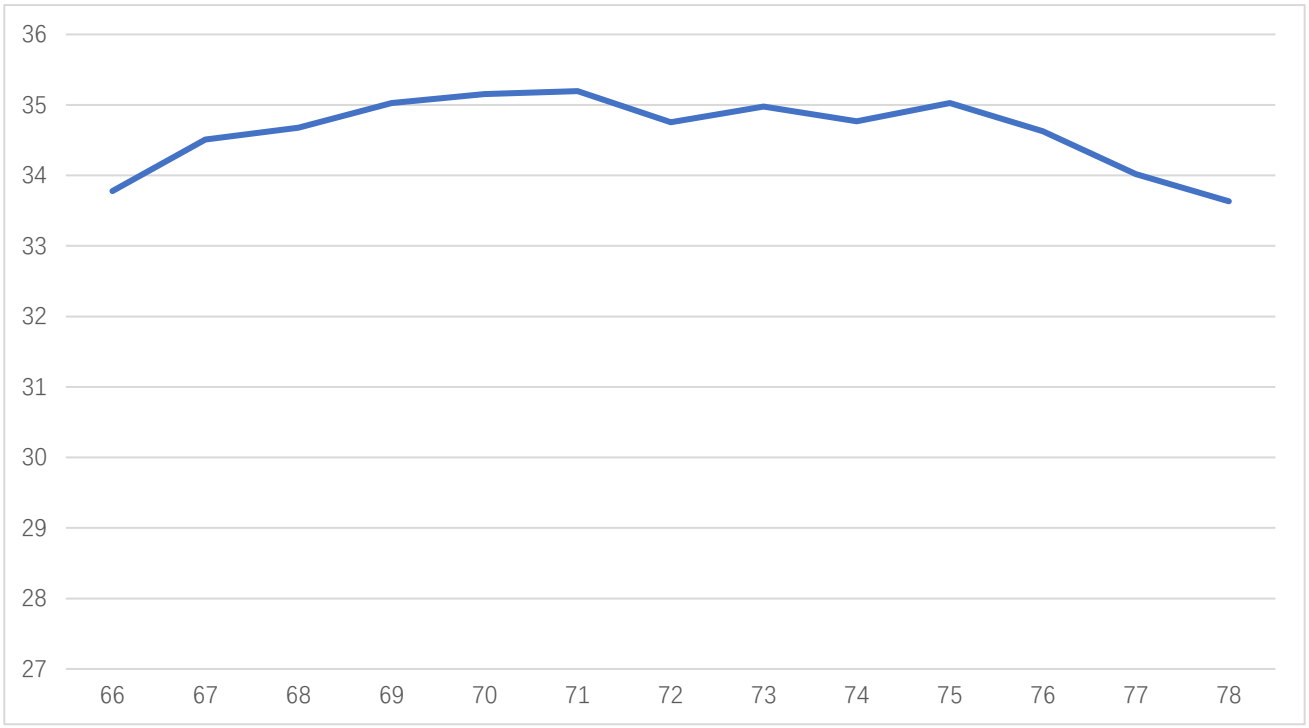
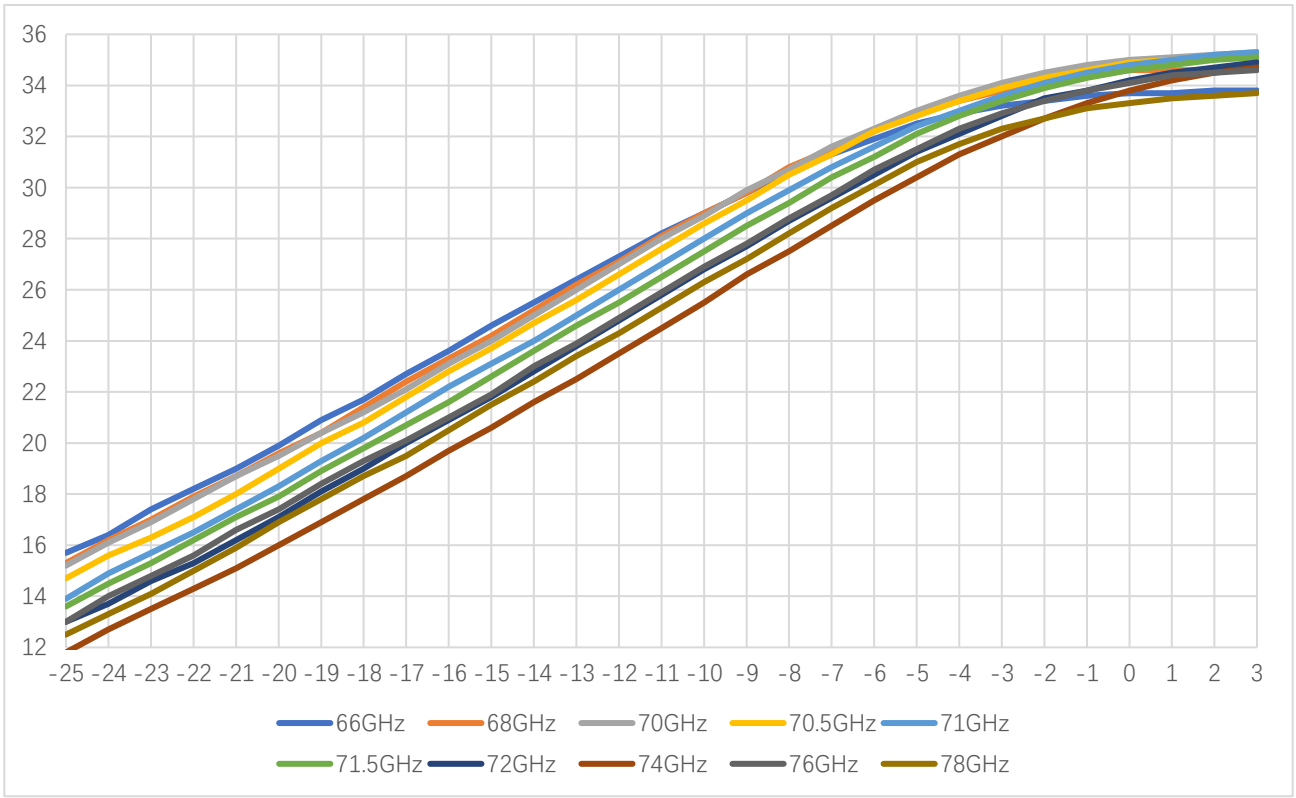


Psat vs Frequency



Pout vs Pin

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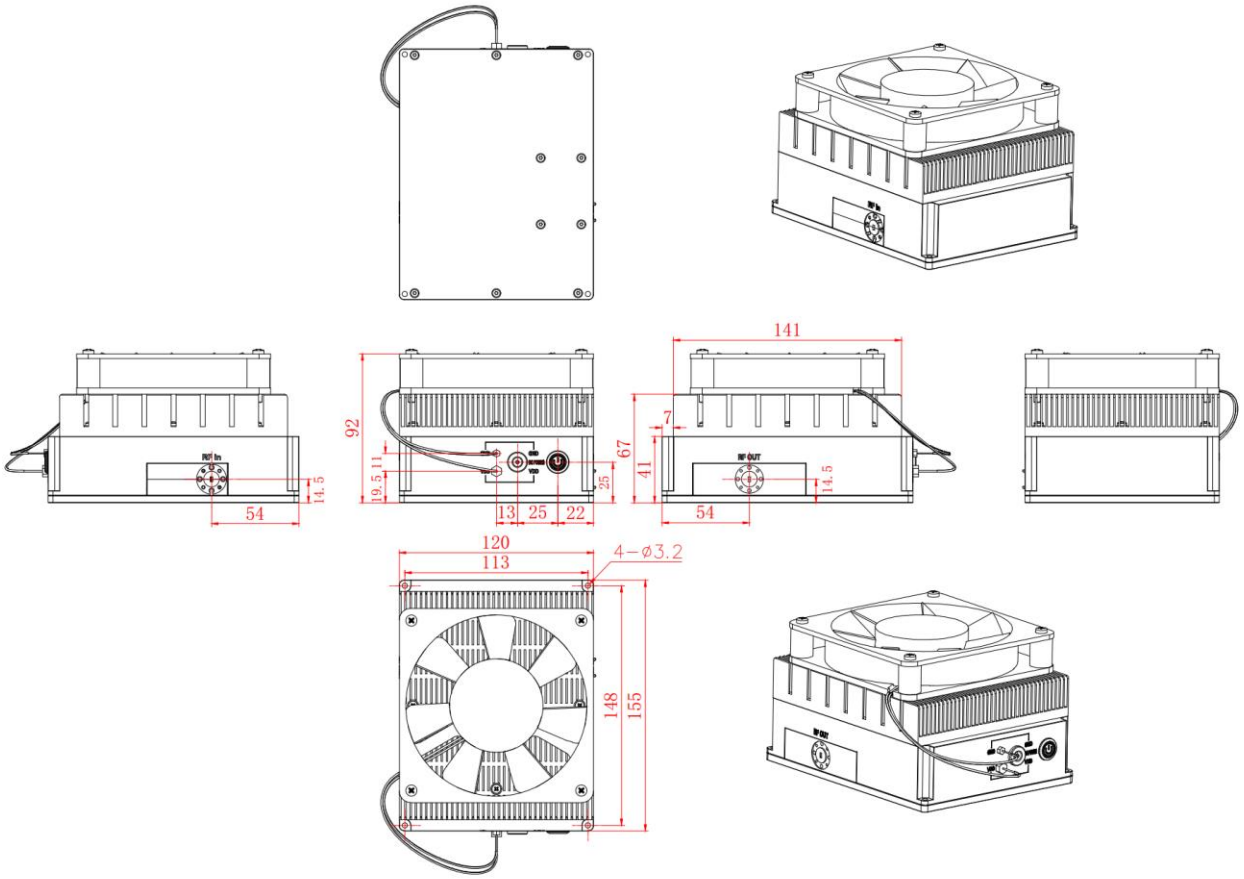
Dimentions(mm)



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