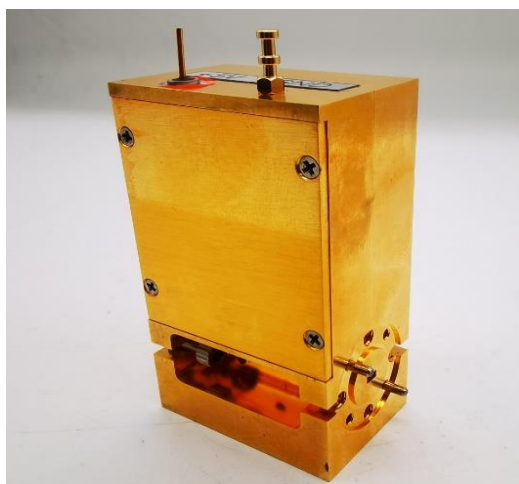


## W Band Power Amplifier, High Gain , Gain=30dB, Psat +25dBm, WR-10



### Product Overview

AT-PA-7894-3025-C10 is 30dB high gain power amplifier with +25dBm output power in the frequency of 78-94GHz. The DC power requirement is +5V/2.3A. 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.

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

### Advantages

- ✓ Frequency: 78-94GHz
- ✓ Psat:+25dBm
- ✓ Small signal gain: 30dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		78-94GHz	
Gain (Small Signal Gain)	28	30dB	
Output P1	+22dBm	+23dBm	
Output Saturated Power	+23dBm	+25dBm	
Supply Voltage (V)		+5V	+6V
Quiescent Current/A (No RF)		2.3A	
Psat Current/A		2.7A	3.2A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	

Note: Heat Sink is required.





# AT-PA-7894-3025-C10

78-94GHz Power Amplifier, Psat=+25dBm

## Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	300g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
RF Input Power	+10dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

### Caution:

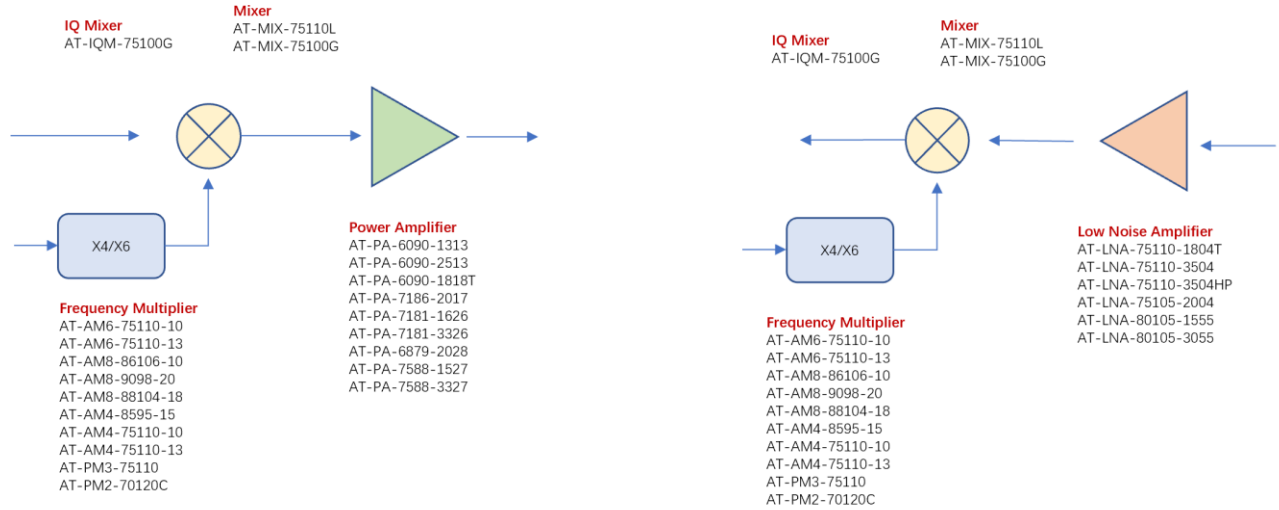
Please pay attention to the case temperature. If case temperature exceeds higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

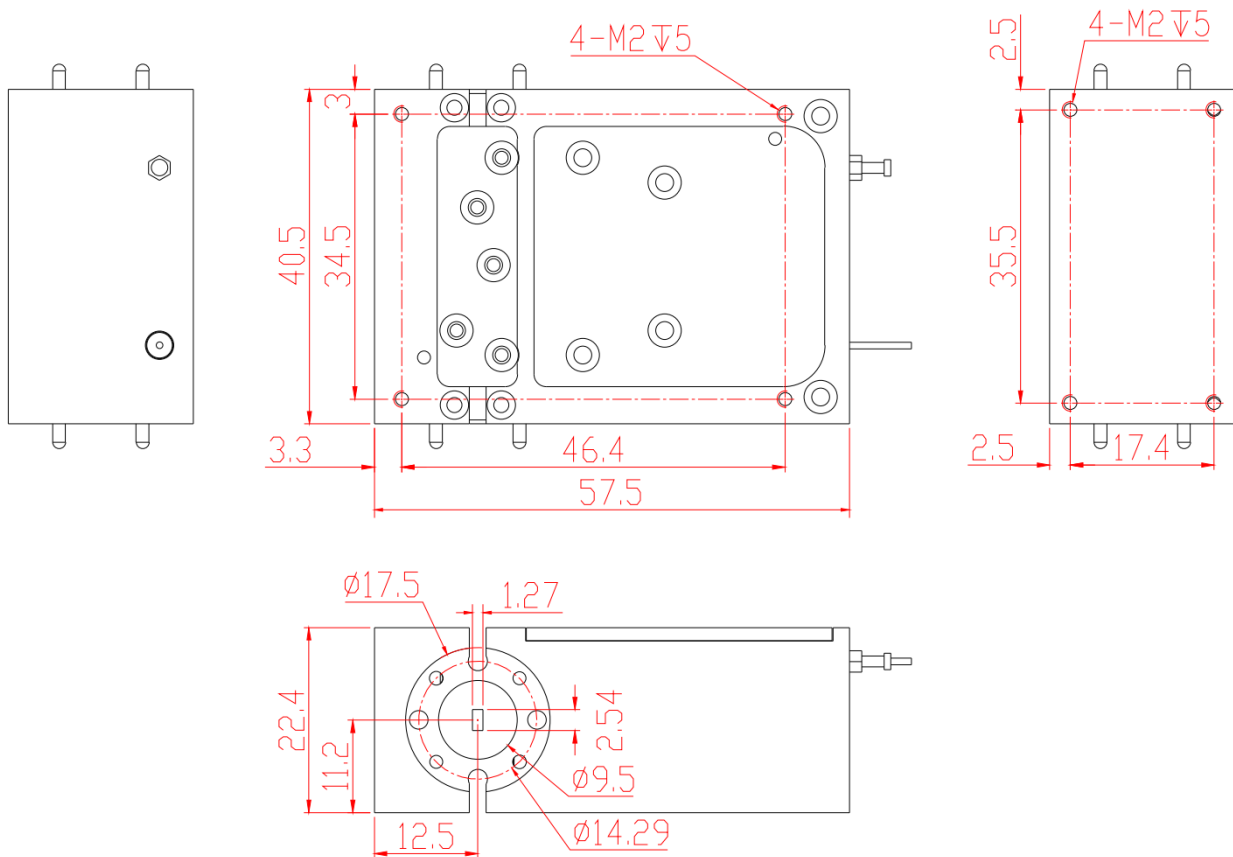
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### W BAND 75-110GHZ



### Dimension: (unit in mm)



Heat Sink Required During Operation

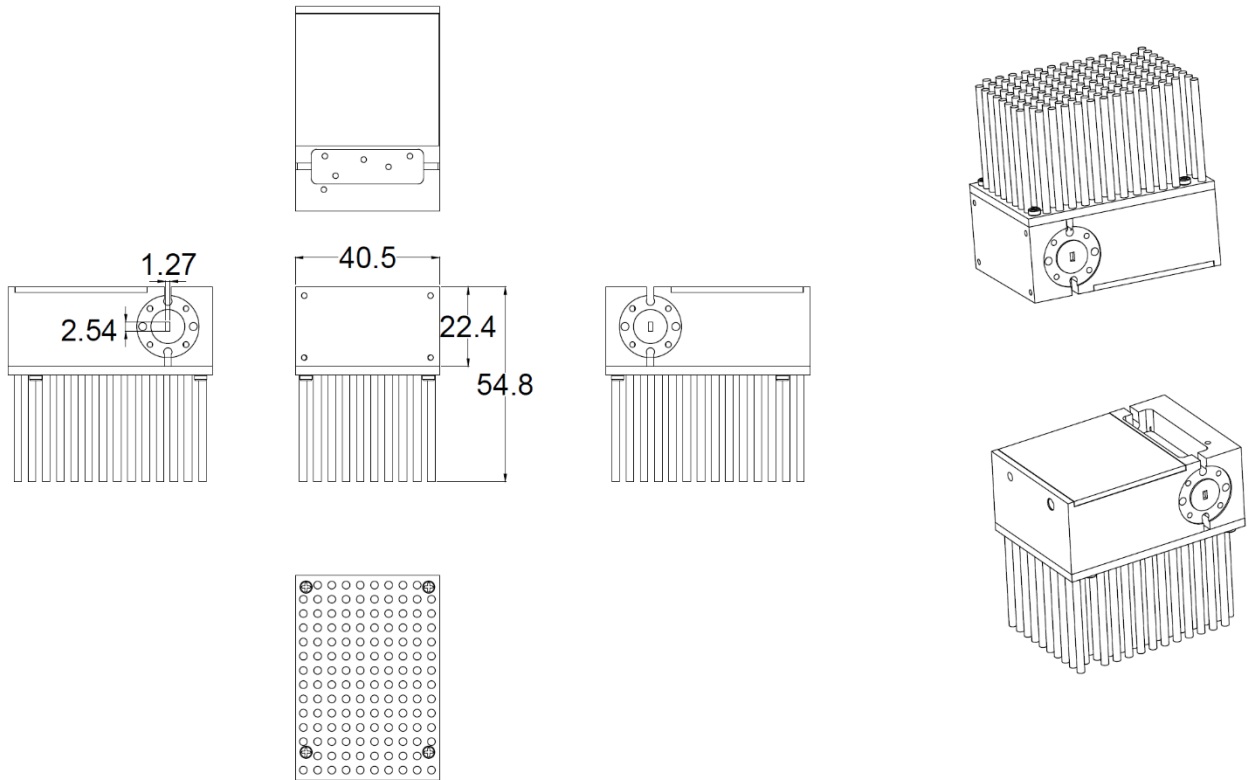




# AT-PA-7894-3025-C10

78-94GHz Power Amplifier,  $P_{sat}=+25dBm$

## Dimension with heatsink:(unit in mm)



### Dimension with Heatsink

AT Microwave provides a heatsink in default if  $P_{out}$  is higher than +20dBm  
Customer can remove the heatsink easily and use their own heatsink if need.

