



# AT-PA-85115-1523GT-08

85-115GHz Power Amplifier, Psat=+23dBm

## F Band Power Amplifier

### 85-115GHz, Gain=15dB, Pout=+23dBm ,WR-08



#### Product Overview

AT-PA-85115-1523GT-08 is power amplifier with +23dBm output power in the frequency of 85-115GHz. The DC power requirement is +18V/250mA. The module is with a standard WR-08 waveguide.

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: 85-115GHz
- ✓ Psat:+23 dBm
- ✓ Small signal gain: 15dB
- ✓ Single Power Supply

#### Application

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

#### Key Features

Parameter	Min	Typical	Max
Frequency		85-115GHz	
Gain	12dB	15dB	
Drain Supply		+18V	+22V
Quiescent Current/A (NO RF)		0.25A	
PSAT Current/A		0.3A	
P1Db		+16dBm	
Psat	+22dBm	+23dBm	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Temp Spec		25C	

Note: Heatsink and fan are required.

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## Mechanical Information

Item	Description
Input Port	WR-08
Output Port	WR-08
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	221g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+24V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

## 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.

## Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter

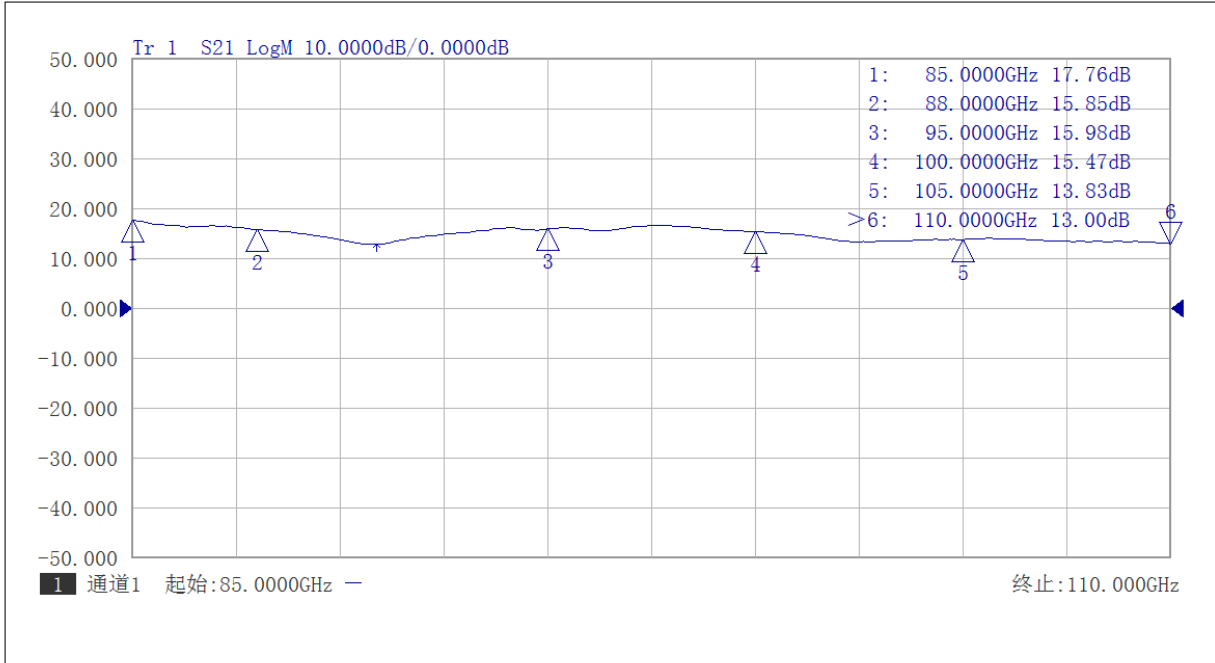




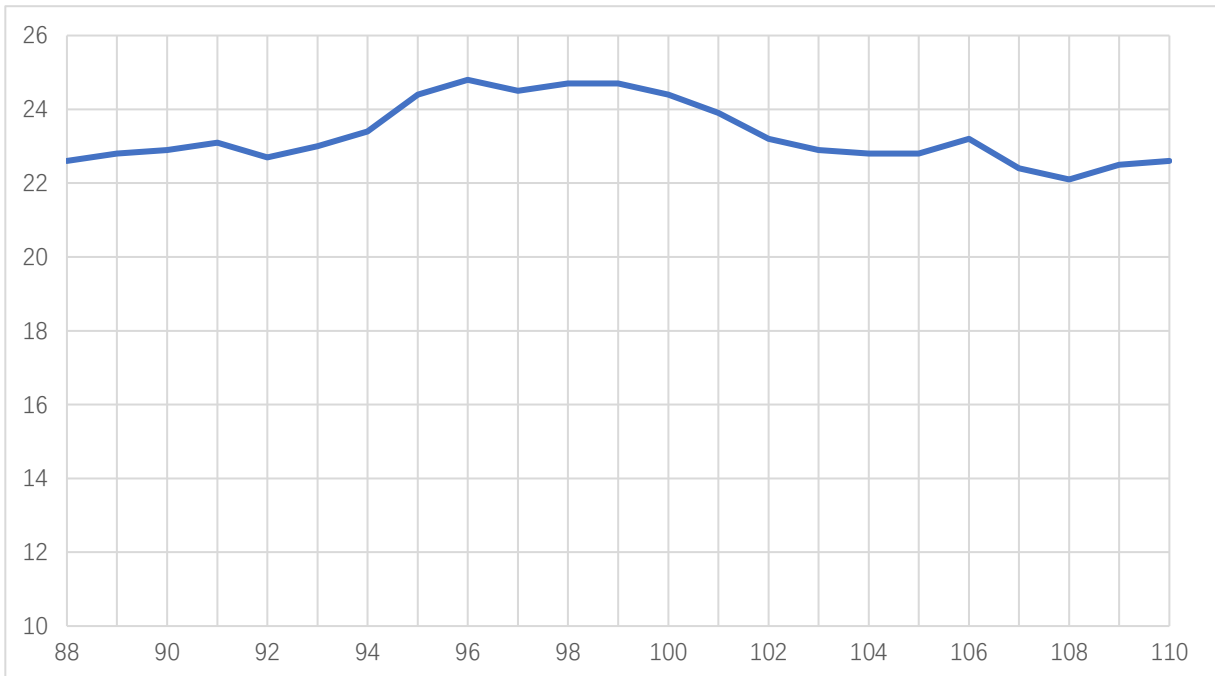
# AT-PA-85115-1523GT-08

85-115GHz Power Amplifier, Psat=+23dBm

## Test Data:



Gain vs Frequency



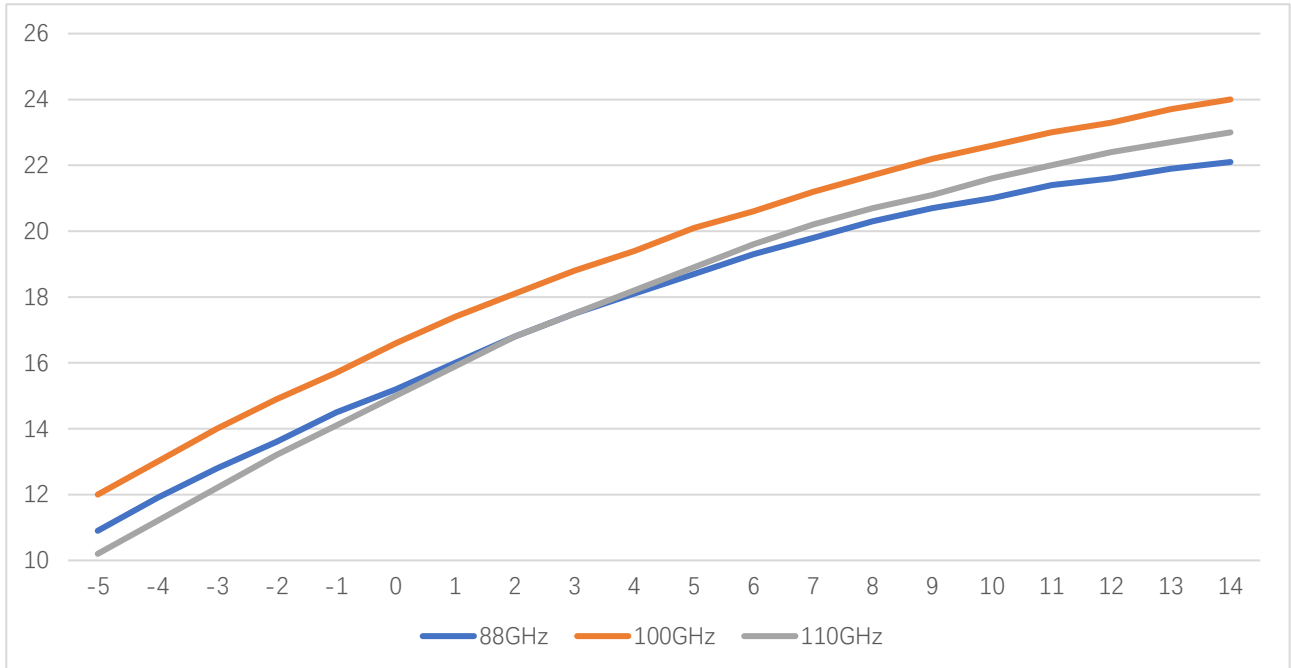
Pout vs Frequency





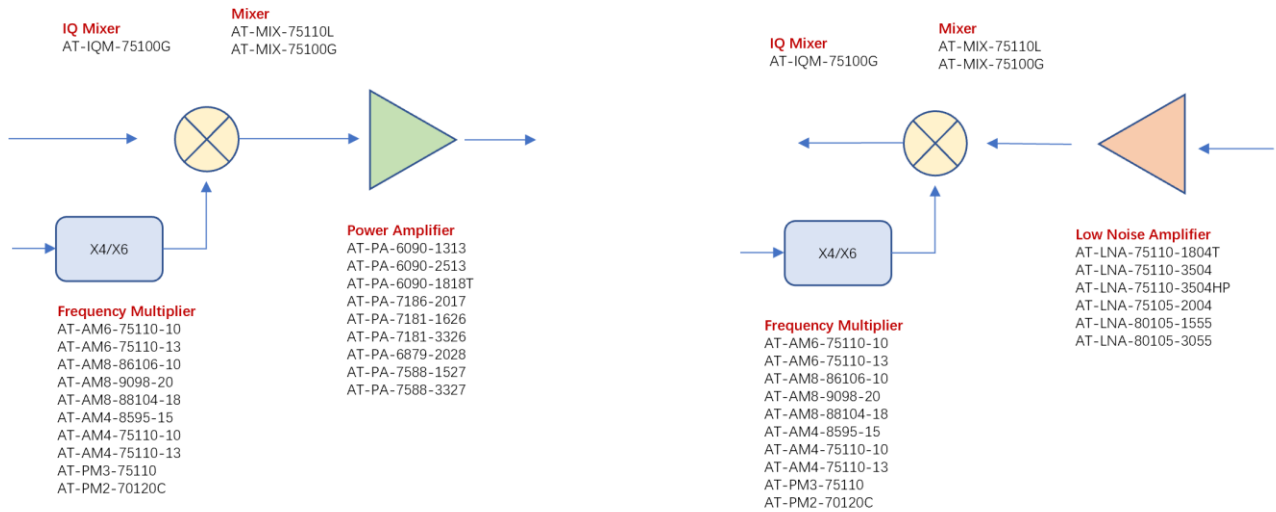
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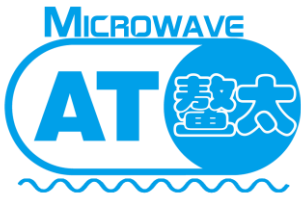
85-115GHz Power Amplifier, Psat=+23dBm



Pout vs Pin at 85/100/110GHz

## W BAND 75-110GHZ

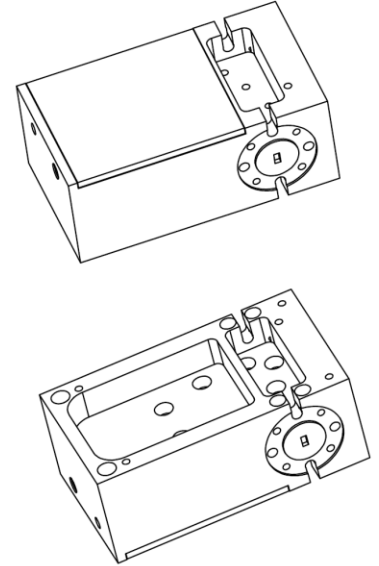
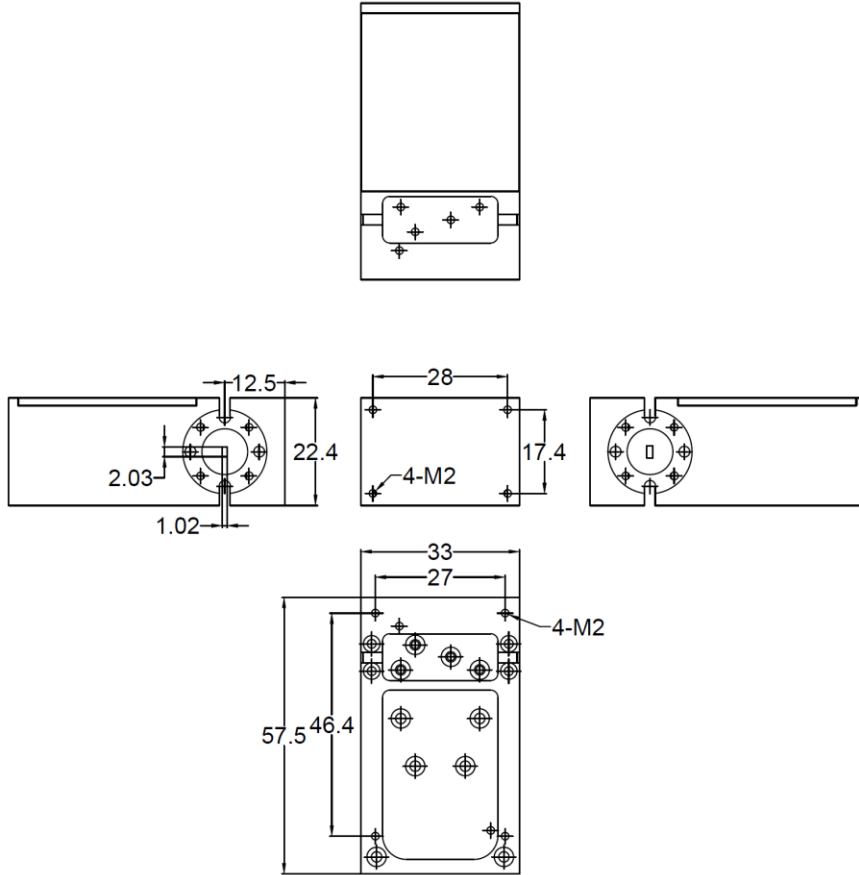




# AT-PA-85115-1523GT-08

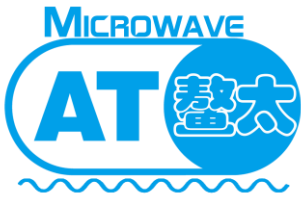
85-115GHz Power Amplifier, Psat=+23dBm

**Dimension:**(unit in mm)



设计	审核	签名	日期	等级	版本	重

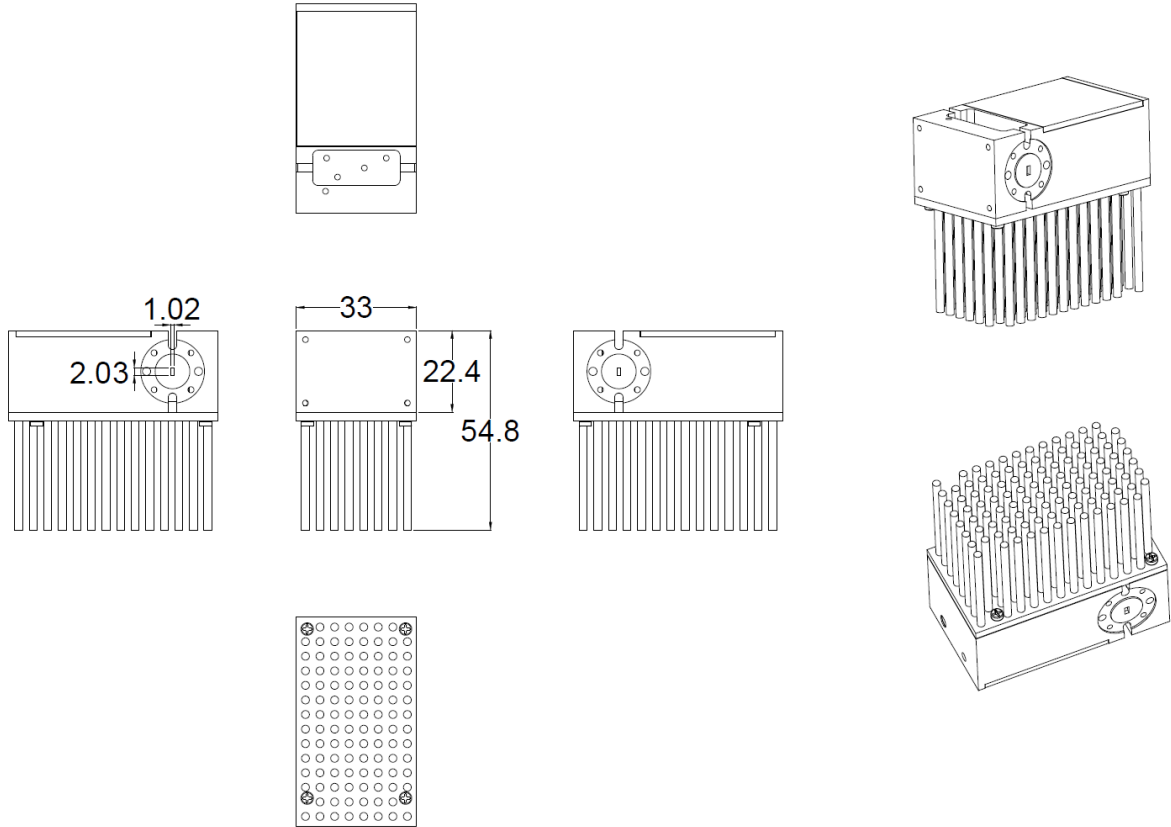




# AT-PA-85115-1523GT-08

85-115GHz Power Amplifier,  $P_{sat}=+23dBm$

## 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.

