



AT-PA-85110-1523GT-10

85-110GHz Power Amplifier, Psat=+23dBm

W Band Power Amplifier



Product Overview

AT-PA-85110-1523GT is power amplifier with +23dBm output power in the frequency of 85-110GHz. The DC power requirement is +17V/0.26A. The module is with a standard WR-10 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

Advantages

- ✓ Frequency: 85-110GHz
- ✓ 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		85-110GHz	
Gain	12dB	15dB	
Drain Supply		+17V	+22V
Quiescent Current/A (NO RF)		0.18A	
PSAT Current/A		0.26A	
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-10
Output Port	WR-10
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

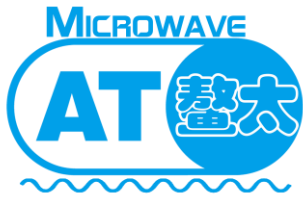
Notes:

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
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter

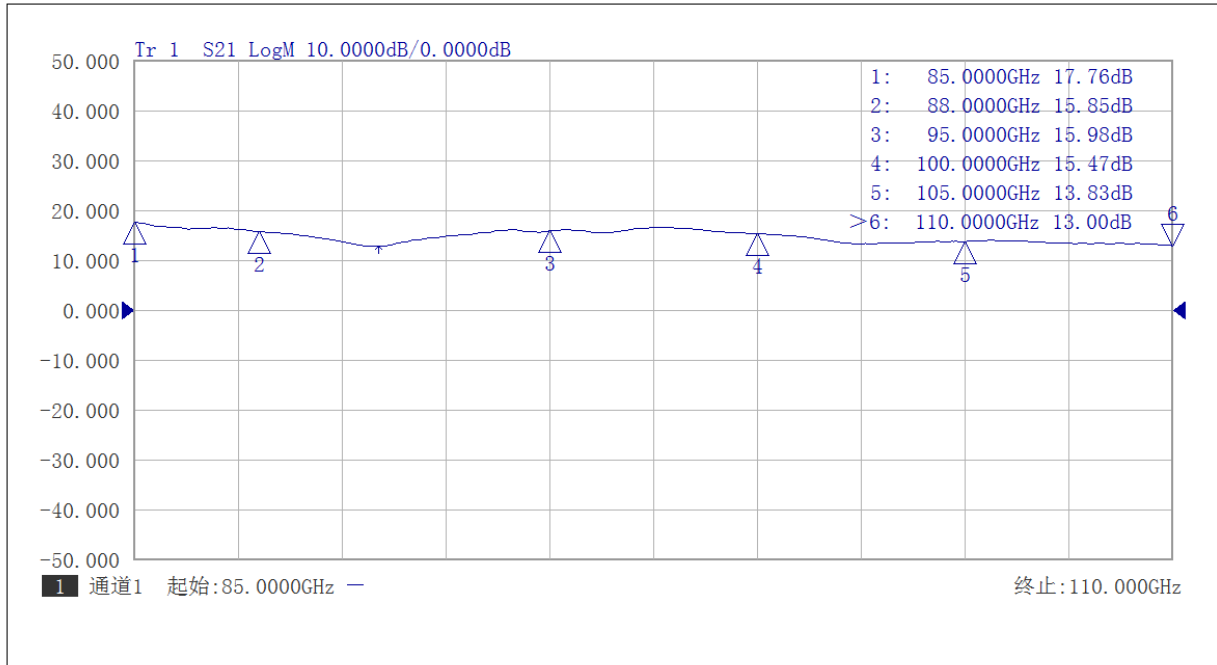




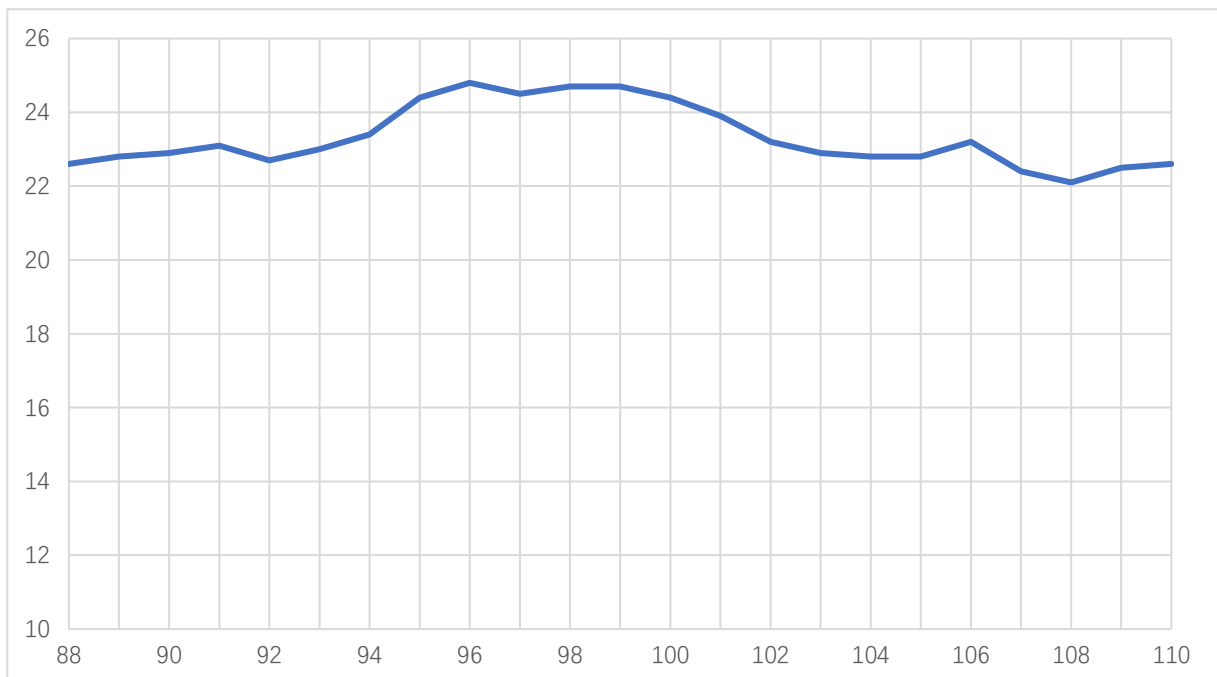
AT-PA-85110-1523GT-10

85-110GHz Power Amplifier, $P_{sat}=+23\text{dBm}$

Test Data:



Gain vs Frequency



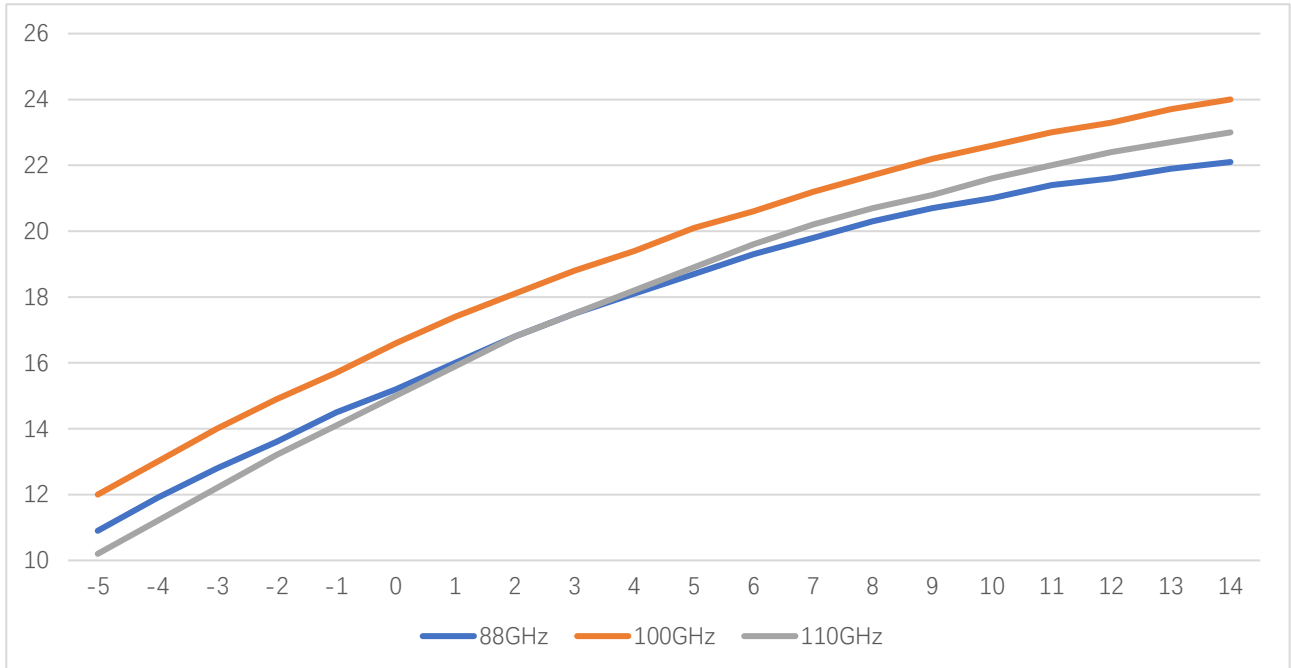
Pout vs Frequency





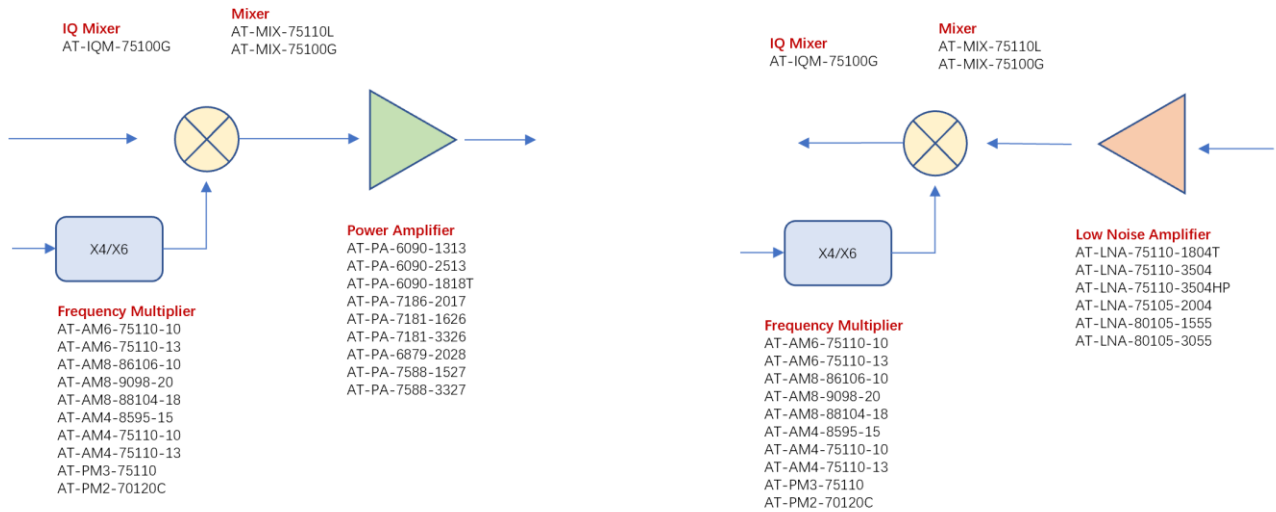
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85-110GHz Power Amplifier, Psat=+23dBm

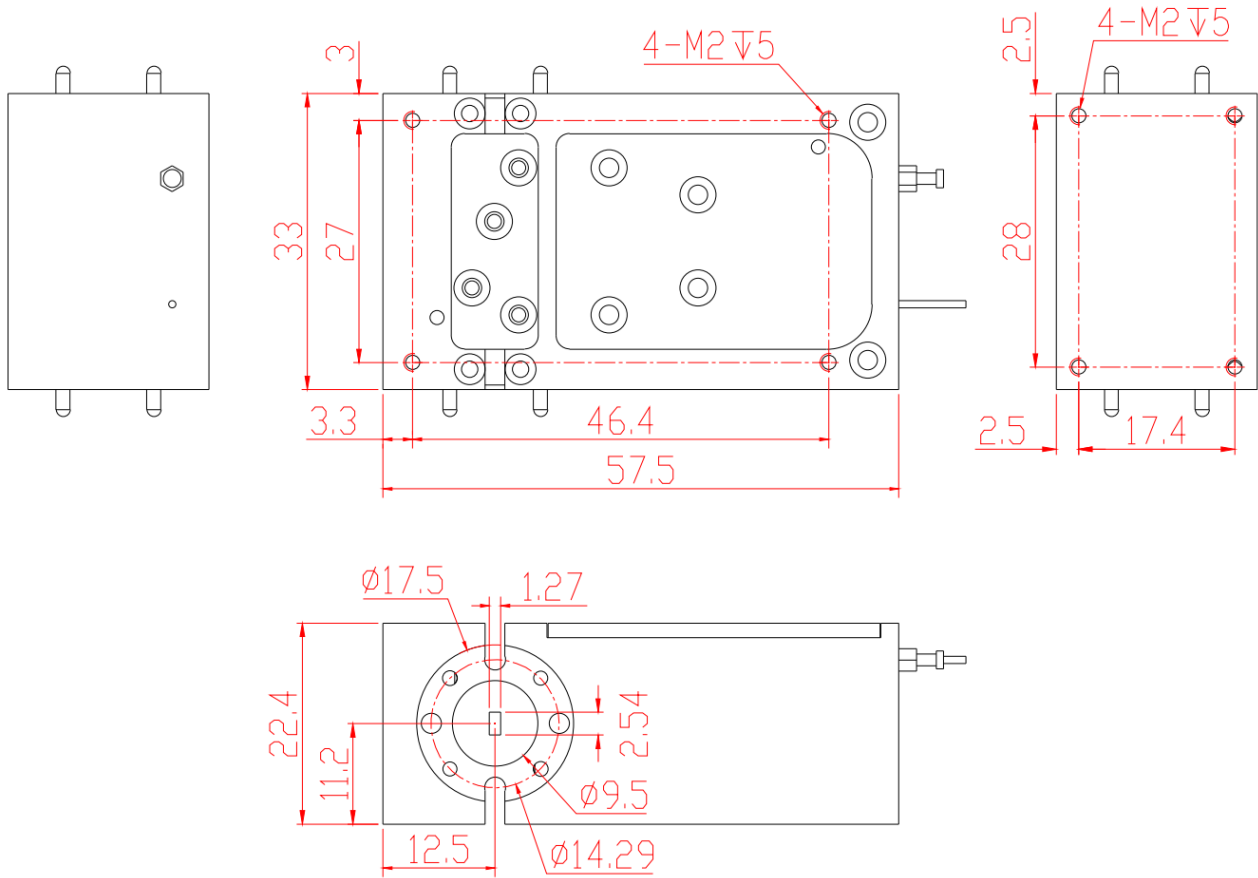


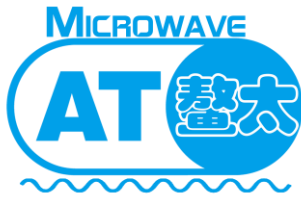
Pout vs Pin at 85/100/110GHz

W BAND 75-110GHZ



Dimension:(unit in mm)

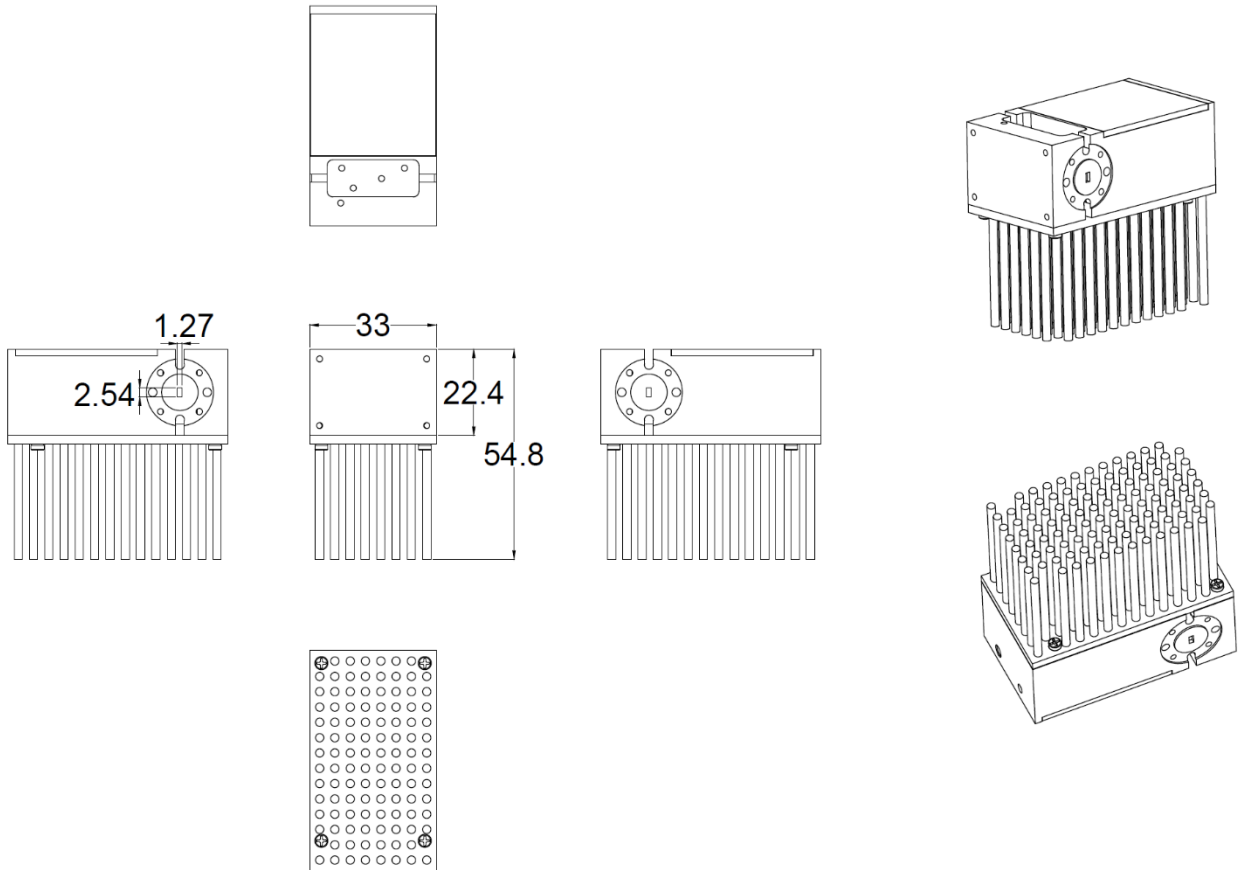




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85-110GHz Power Amplifier, $P_{sat}=+23dBm$

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.

