# AT-PA-80100-1620

80-100GHz Power Amplifier, Psat=+20dBm

# W Band Broadband Power Amplifier

## Product Overview

AT-PA-80100-1620 is power amplifier with +20dBm output power in the frequency of 80-100GHz. The DC power requirement is +5V/800mA. 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: 80-100GHz
- ✓ Psat:+20dBm
- ✓ Small signal gain: 16dB
- ✓ 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 | | 80-100GHz | |
| Gain | | 16dB | |
| Drain Supply | | +5V | +8V |
| Quiescent Current/A (NO RF) | | 0.76A | |
| Psat Current/A | | 1.1A | |
| P1dB | | +15dBm | |
| Psat | +18 | +20dBm | |
| Input Return Loss | | -7dB | |
| Output Return Loss | | -7dB | |
| 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) | 221g |
| Size: | See outline |

## Absolute Maximum Ratings Table

| Parameter | Value |
|---|---|
| Drain Supply | +9V |
| 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.

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 | Low Cost, Compact Bench-Top, +220V Supply with AC/DC Adapter |




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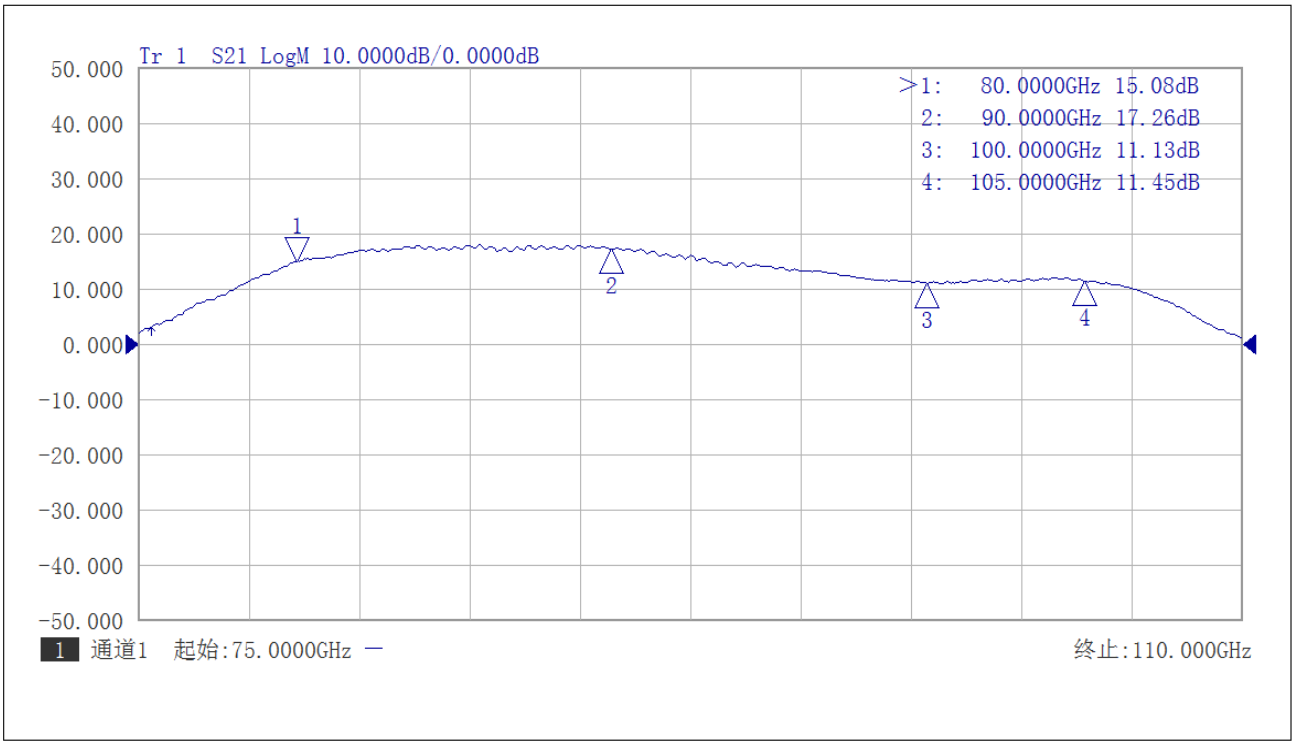
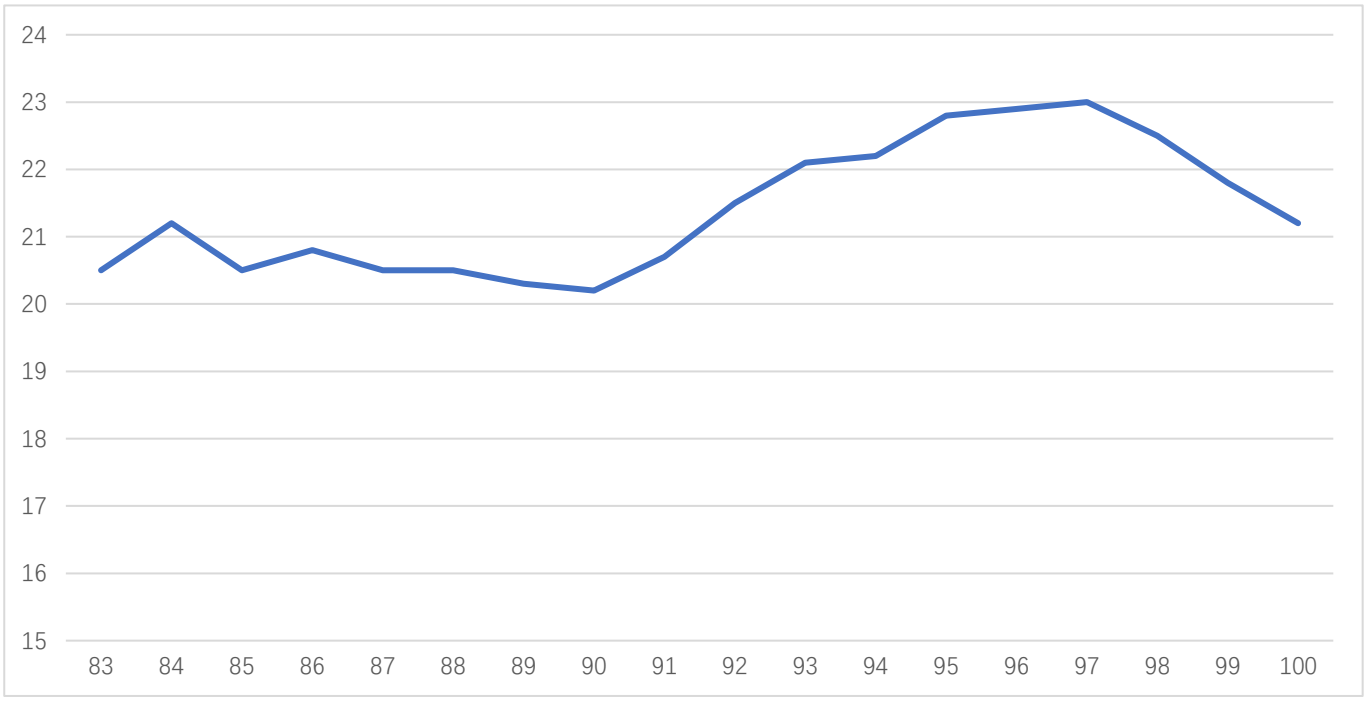
## Test Data:




Gain vs Frequency




Psat vs Frequency

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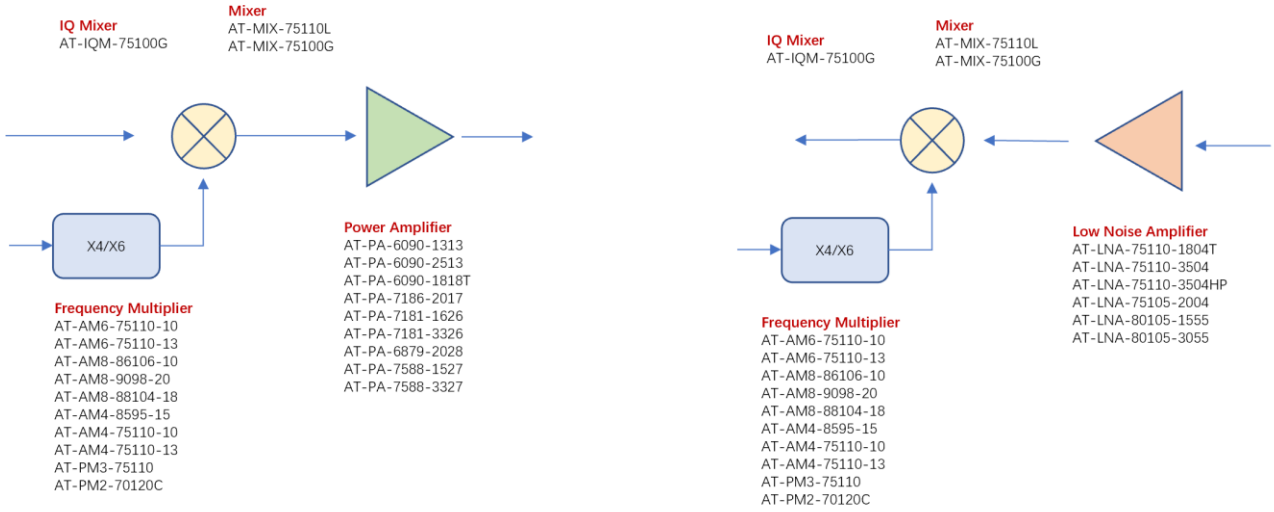
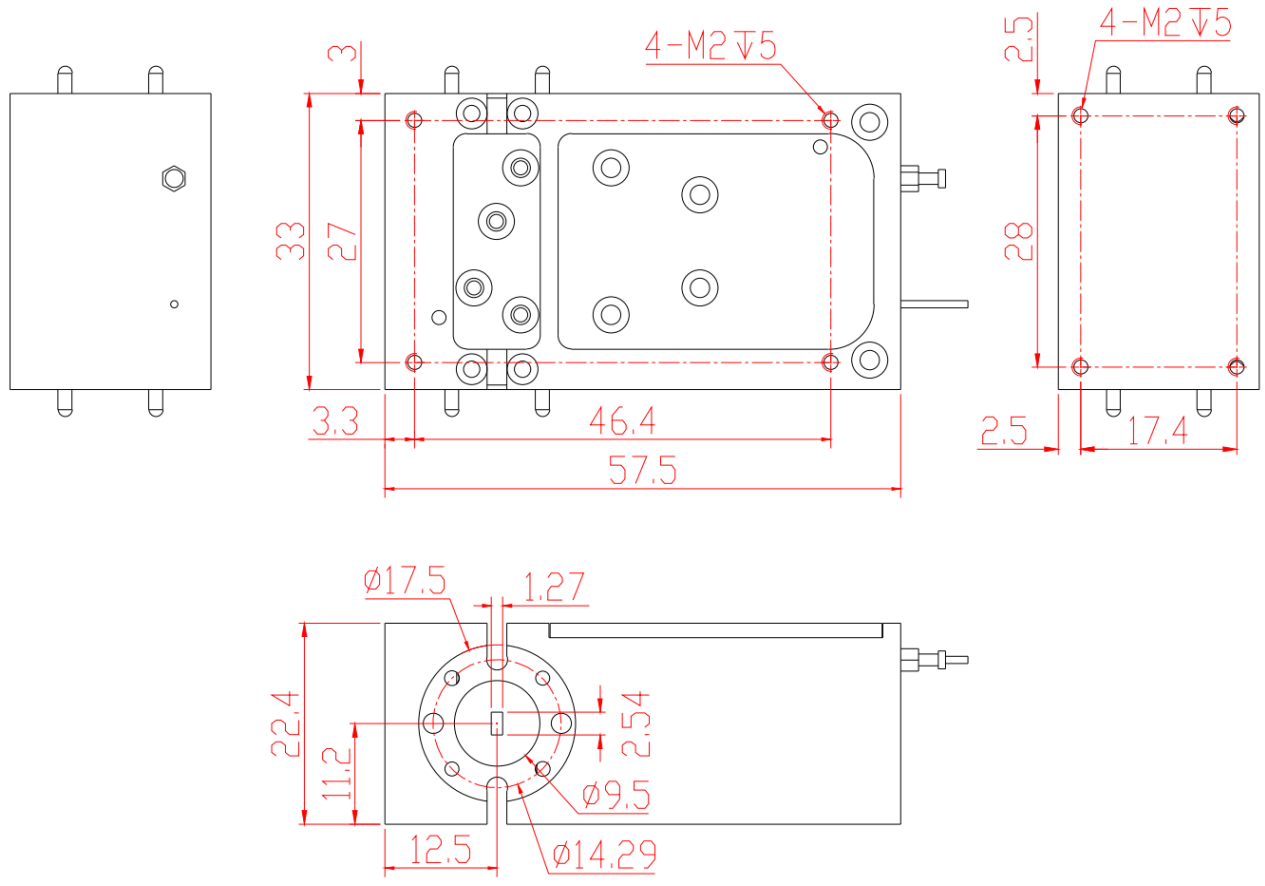
## W BAND 75-110GHZ




## Dimension: (unit in mm)

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# AT-PA-80100-1620

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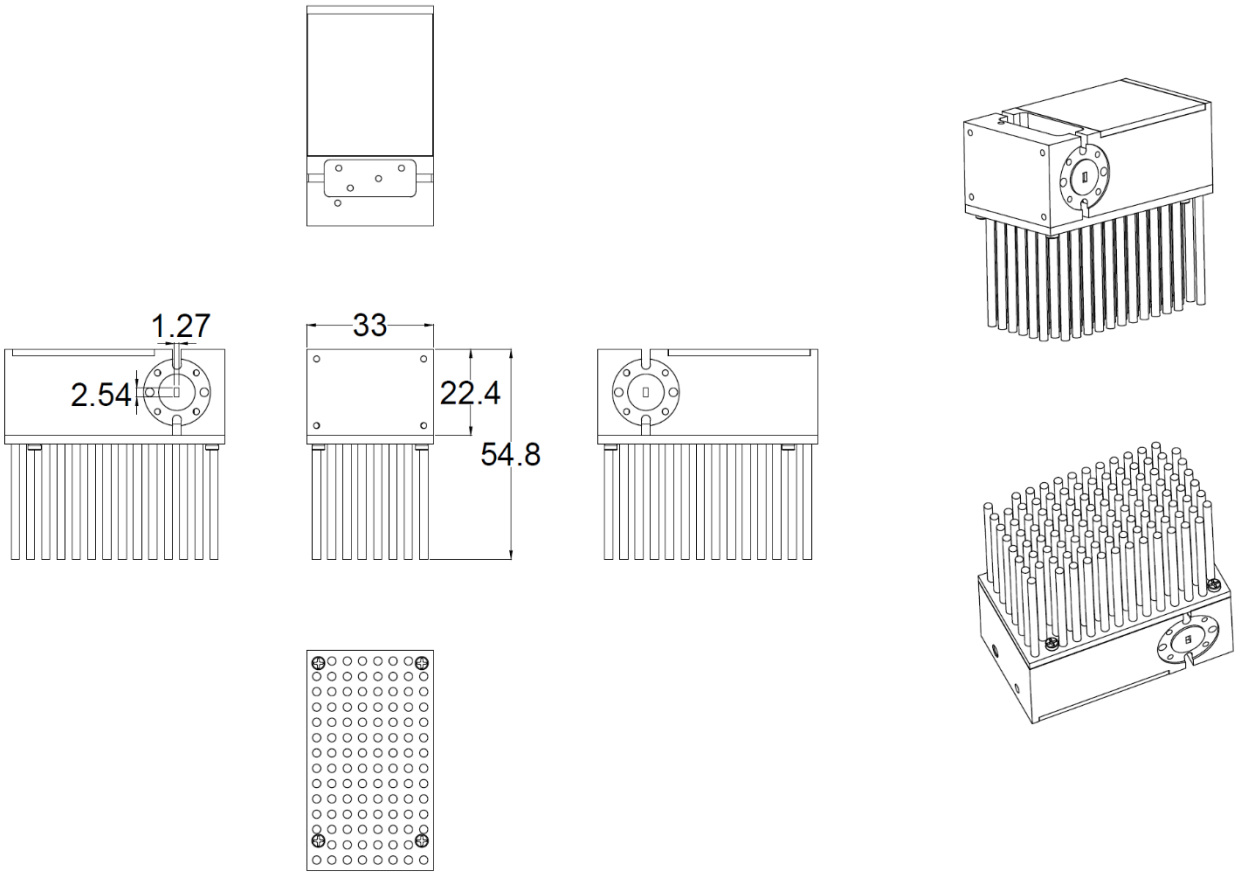
## Dimension with heatsink:(unit in mm)




Dimension with Heatsink

AT Microwave provides a heatsink in default if Pout is higher than +20dBm

Customer can remove the heatsink easily and use their own heatsink if need.

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