



# AT-PA-80135-1320GN-08

80-135GHz Power Amplifier,  $P_{sat}=+20dBm$

## F/D Band Power Amplifier

### 80-135GHz, Gain=13dB, $P_{out}=+20dBm$



#### Product Overview

AT-PA-80135-1320GN-08 is power amplifier with +20dBm output power in the frequency of 80-135GHz. The DC power requirement is +9V/800mA. 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: 80-135GHz
- ✓  $P_{sat}$ : +20 dBm
- ✓ Small signal gain: 13dB
- ✓ 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                   |     | 80-135GHz |      |
| Gain                        |     | 13dB      |      |
| Drain Supply                |     | +9V       | +12V |
| Quiescent Current/A (NO RF) |     | 0.85A     |      |
| PSAT Current/A              |     | 0.95A     |      |
| $P_{sat}$                   |     | +20dBm    |      |
| Input Return Loss           |     | -8dB      |      |
| Output Return Loss          |     | -8dB      |      |
| Temp Spec                   |     | 25C       |      |





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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) | 201g        |
| Size:                     | See outline |

## Absolute Maximum Ratings Table

| Parameter             | Value        |
|-----------------------|--------------|
| Drain Supply          | +13V         |
| RF Input Power        | +18dBm       |
| 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.

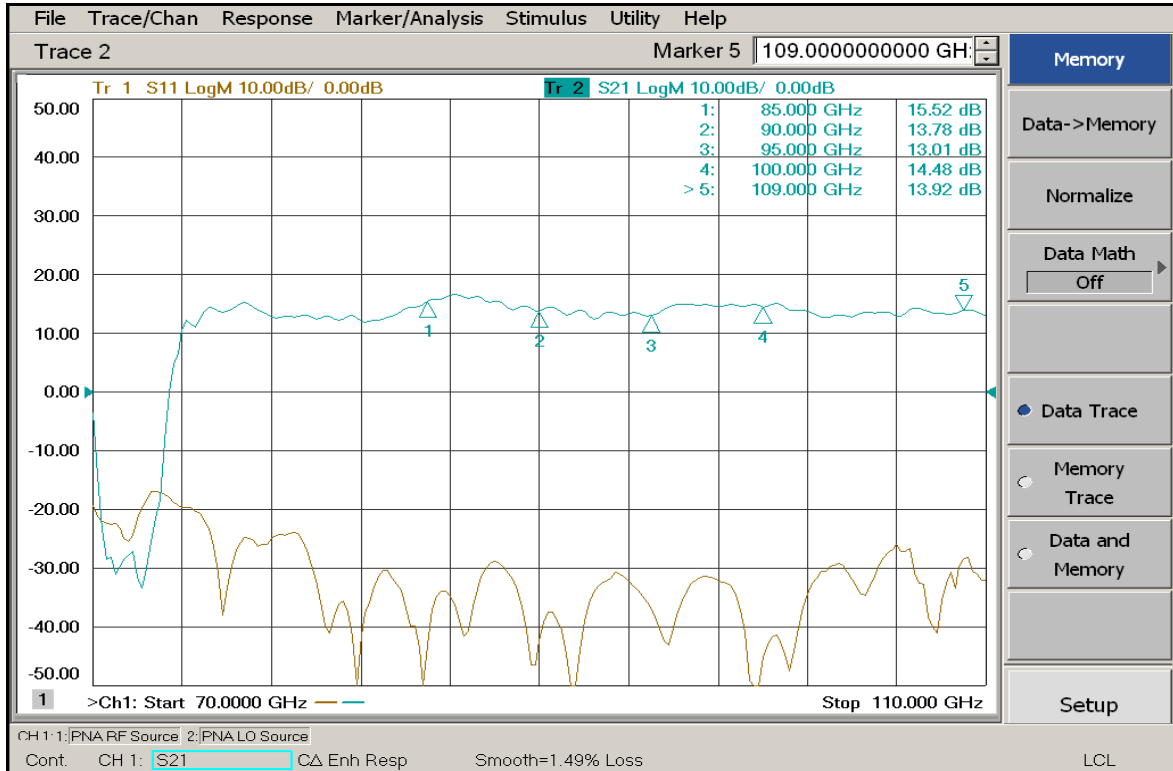




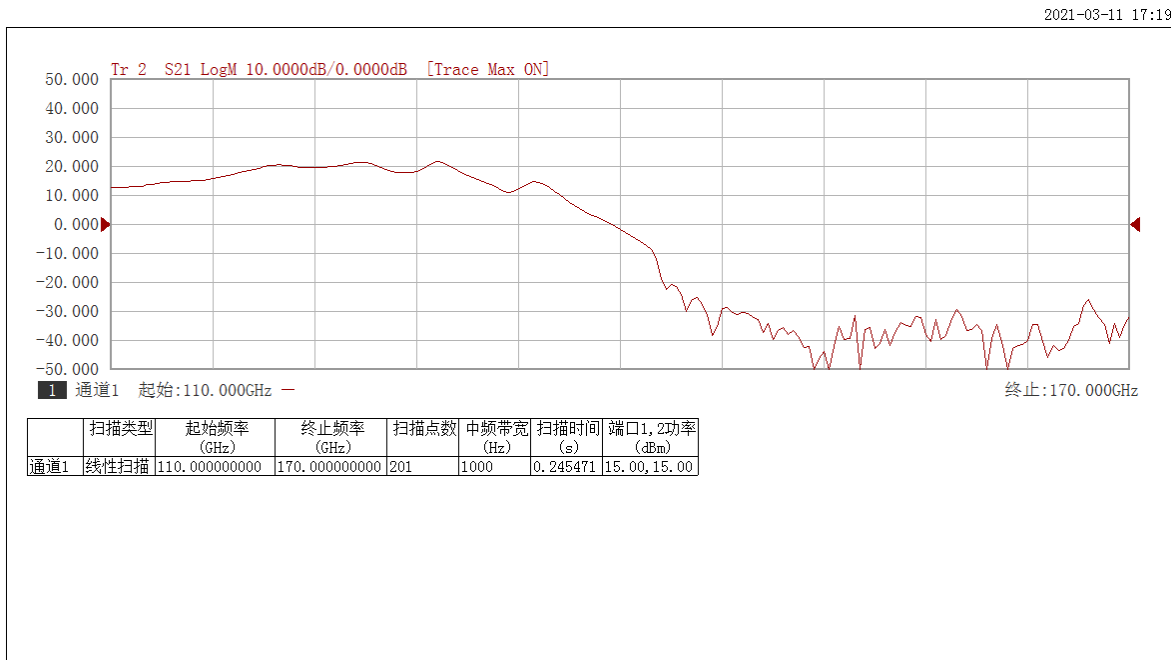
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## Test Data:



Gain vs Frequency 80-110GHz



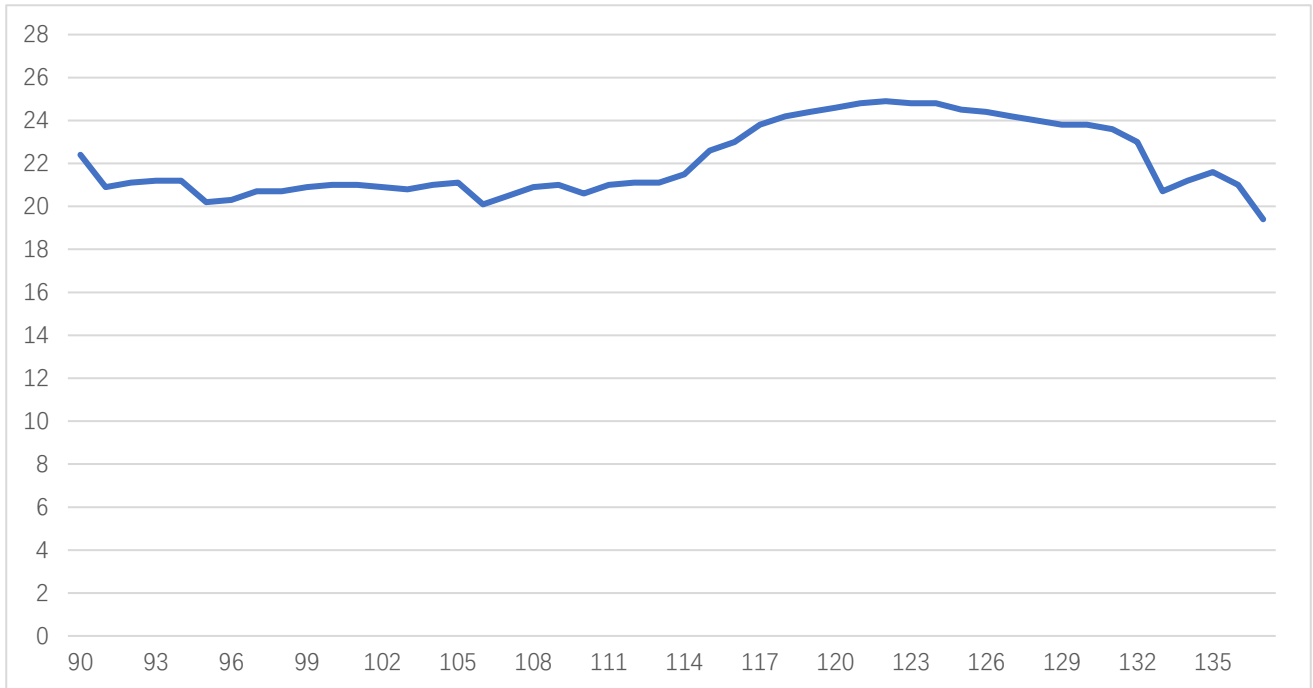
Gain vs Frequency 110-135GHz





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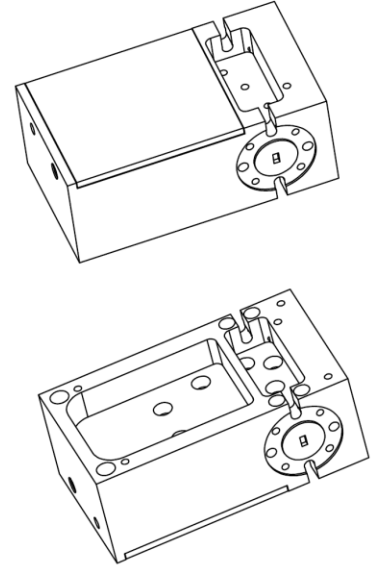
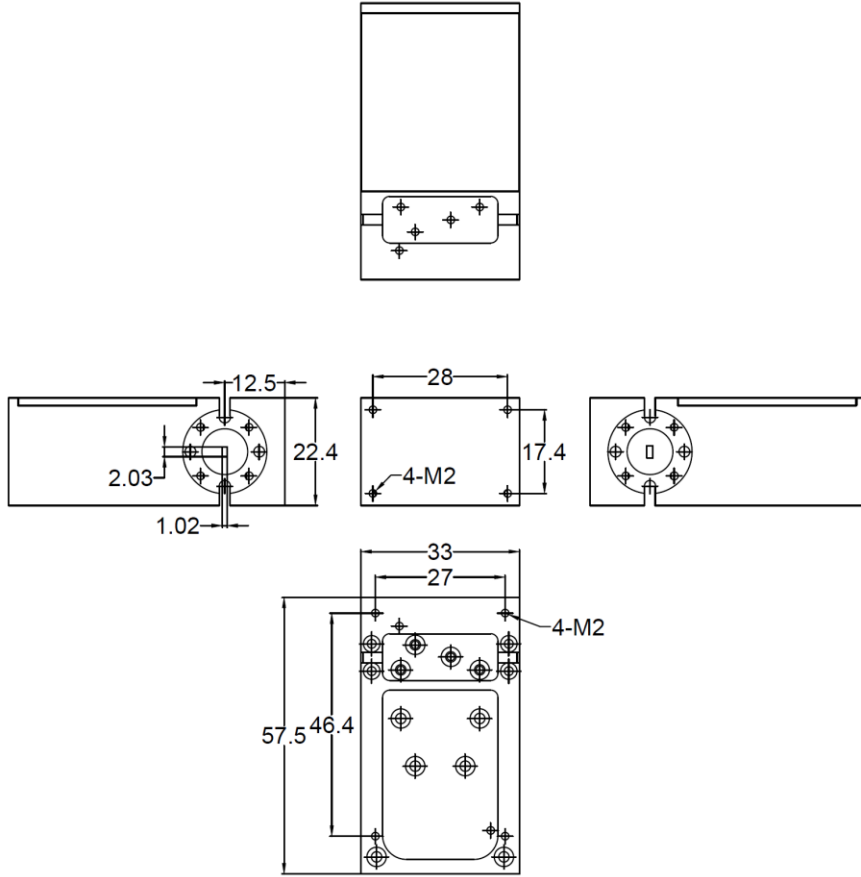
80-135GHz Power Amplifier, Psat=+20dBm



Psat vs Frequency



**Dimension:**(unit in mm)



| 设计 | 审核 | 签名 | 日期 | 等级 | 版本 | 重 |
|----|----|----|----|----|----|---|
|    |    |    |    |    |    |   |

