

15-43GHz Broadband Amplifier, +28dBm

2021-5-30



Product Overview

AT-PA-1543-4328CT is high gain power amplifier with +28dBm output power in the frequency of 15-43GHz. The DC power requirement is +6V/1.3A at Psat output. The module is with 2.92mm connector.

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: 15-43GHz
- ✓ Psat:+28dBm
- ✓ Small signal gain: 43dB
- ✓ Single Power Supply

Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

| Parameter | Min | Typical | Max |
|--------------------|-----|----------|-----|
| Frequency | | 15-43GHz | |
| Gain | | 43dB | |
| P1dB | | +27dBm | |
| Psat | +27 | +28dBm | |
| Drain Supply | | +6V | +8V |
| Current NO RF | | 1.0A | |
| Idd Psat | | 1.3A | |
| Input Return Loss | -5 | -10 dB | |
| Output Return Loss | -5 | -10 dB | |
| Spec Temp | | 25C | |





AT-PA-1543-4328CT

15-43GHz Power Amplifier

Mechanical Information

| Item | Description |
|---------------------------|---------------|
| Input Port | 2.92mm Female |
| Output Port | 2.92mm Female |
| Case Material | Copper |
| Finish | Gold Plated |
| Weight (Without Heatsink) | 90g |
| Size: | 60X45X14 mm |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +13V |
| RF Input Power | +15 dBm |
| Operating Temperature | -20 to +70C |
| Storage Temperature | -65 to +125C |

Caution:

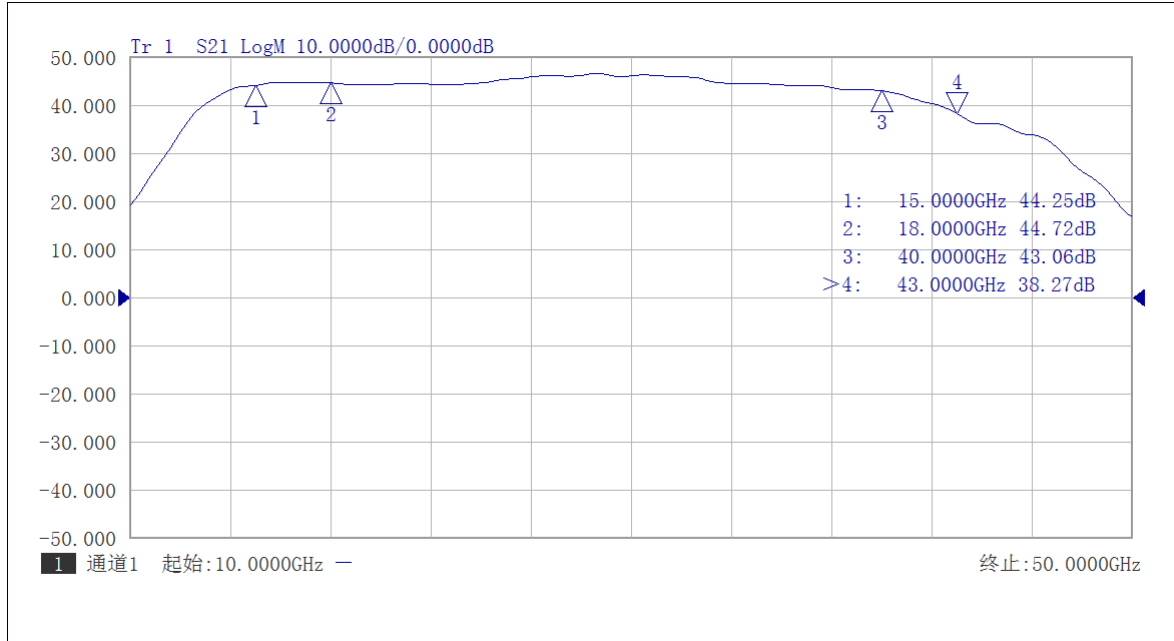
Please pay attention to the case temperature. If case temperature exceed higher than +43C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

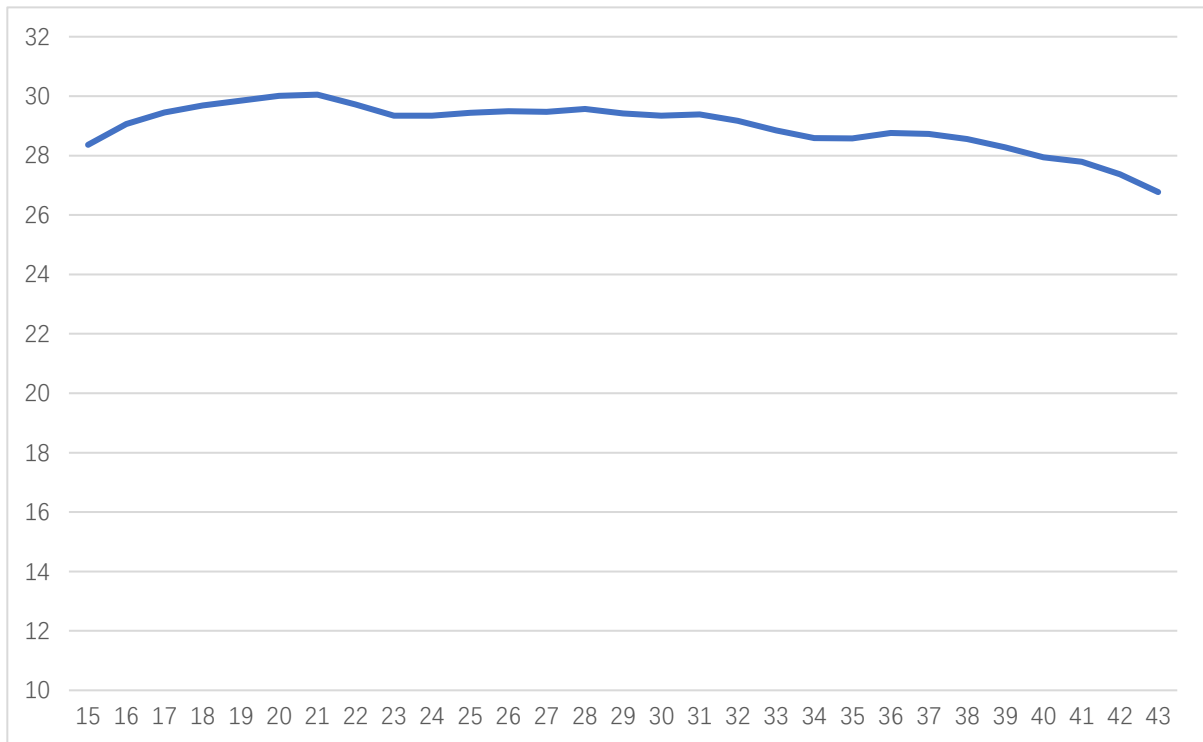
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:



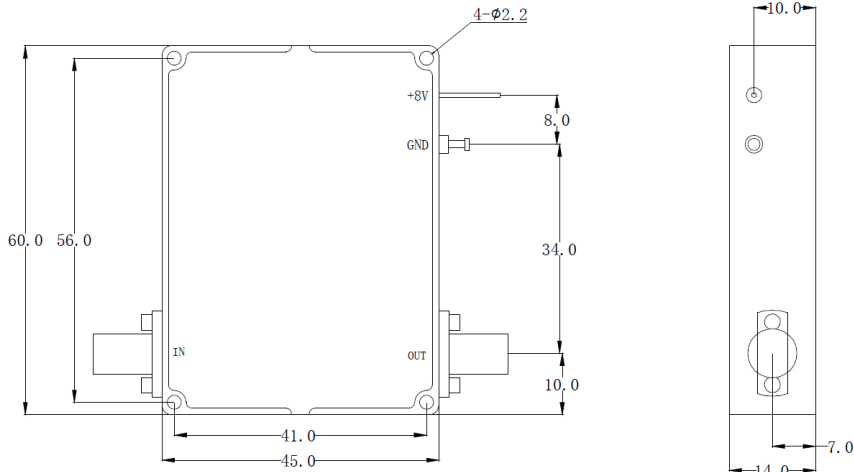
Gain vs Frequency



Psat vs Frequency

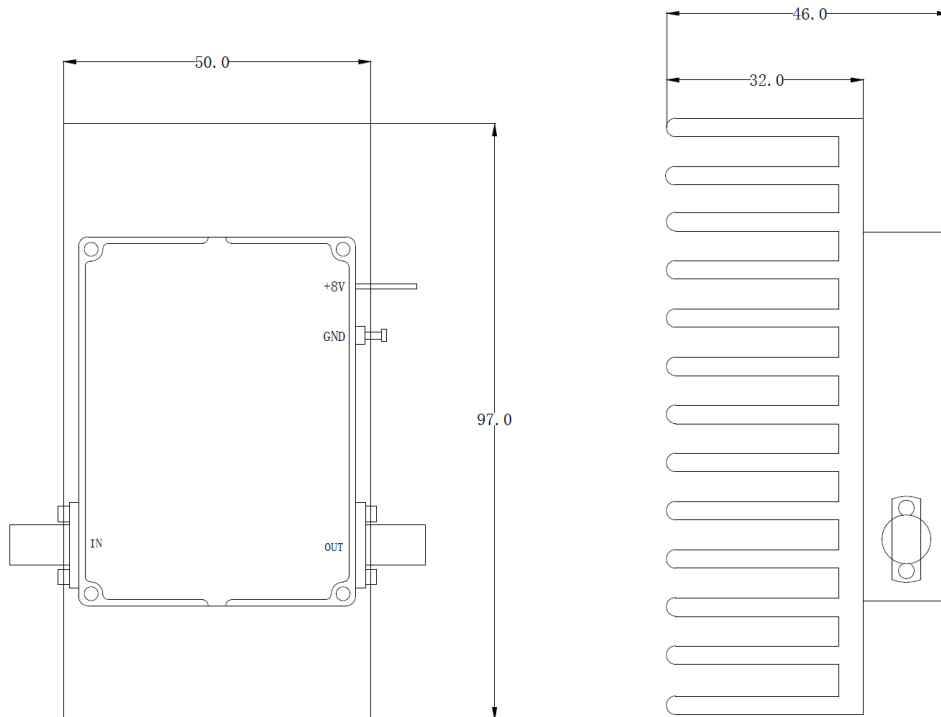


Dimension: (unit in mm)



| | <26.5GHz | <40GHz | <50GHz | <67GHz |
|------------|----------|--------|--------|--------|
| Connector | SMA | 2.92mm | 2.4mm | 1.85mm |
| Lenth of a | 9.4mm | 9.5mm | 10.8mm | 11.3mm |

Note: Female Default. Contact with us for other types.



Including a small heatsink without Fan if output Power higher than +20dBm.
Customers can removed it or use their own heatsink according to actual situation.

Heat Sink Required During Operation if case Temp higher than 50C

