

22-47GHz Broadband Amplifier, +23dBm



Product Overview

AT-PA-2247-3023C is high gain power amplifier with +23dBm output power in the frequency of 22-47GHz. The DC power requirement is +8V/560mA. The module is with 2.4mm 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: 22-47GHz
- ✓ Psat:+23dBm
- ✓ Small signal gain: 30dB
- ✓ Single Power Supply

Application

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

Key Features

| Parameter | Min | Typical | Max |
|------------------|-------|----------|------|
| Frequency | | 22-47GHz | |
| Gain | | 30dB | |
| P1dB | | +22dBm | |
| Psat | | +23dBm | |
| OIP3(Pout=+5dBm) | | +26dBm | |
| Drain Supply | +5.5V | +8V | +10V |
| Current | | 560 mA | |
| NF | | 4 dB | |
| Input VSWR | | 1.5 | 2.5 |
| Output VSWR | | 1.5 | 2.5 |
| Spec Temp | | 25C | |





AT-PA-2247-3023C

22-47GHz Power Amplifier

Mechanical Information

| Item | Description |
|---------------------------|---------------|
| Input Port | 2.4mm Female |
| Output Port | 2.4mm Female |
| Case Material | Copper |
| Finish | Nickel Plated |
| Weight (Without Heatsink) | 150g |
| Size: | 45x34x8.5 mm |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +13V |
| RF Input Power | +5 dBm |
| Operating Temperature | -20 to +70C |
| Storage Temperature | -65 to +150C |

Caution:

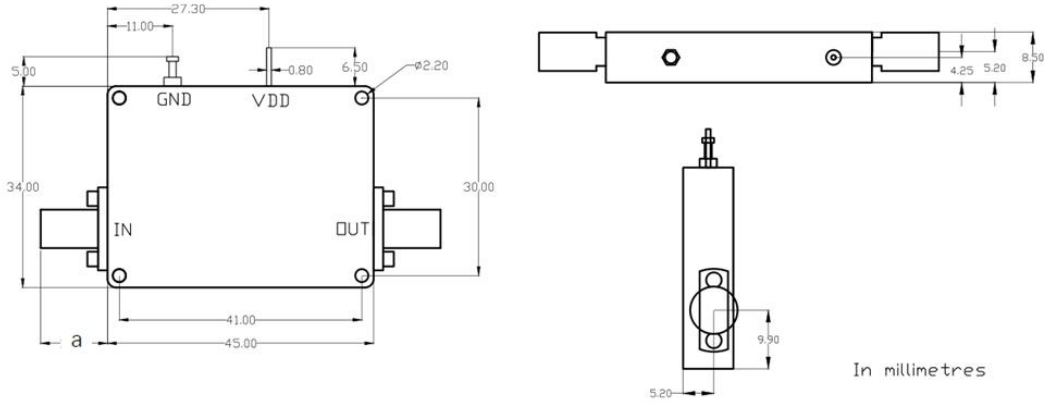
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

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.



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.

Heat Sink Required if Case Temp over 50C

