

10MHz-50GHz Broadband Amplifier



Product Overview

AT-PA-0050-2720 is broadband amplifier from 10MHz-50GHz, with $P_{out}=+20\text{dBm}$, $NF=6\text{dB}$. It can be used both as Power amplifier or low noise amplifier. The DC power requirement is $+8\text{V}/400\text{mA}$. The module is with 2.4mm Female

The broadband amplifier has high gain, high linearity, low input/output return loss and flat gain response.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 10MHz-50GHz
- ✓ P_{sat} : +20dBm
- ✓ Small signal gain: 27dB
- ✓ Single Power Supply

Application

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

Key Features

| Parameter | Min | Typical | Max |
|--------------|-------|--|------|
| Frequency | | 10MHz-50GHz | |
| Gain | | 27dB | |
| P1dB | | 10MHz-30GHz: +20dBm 30GHz-40GHz: +18dBm | |
| Psat | | 10MHz-30GHz: +22dBm 30GHz-40GHz: +20dBm | |
| Drain Supply | +5.5V | +8V | +10V |
| Current | | 400 mA | |
| NF | | 6dB | |
| Input VSWR | | 1.5 | 2.2 |
| Output VSWR | | 2.0 | 2.8 |
| Dimension | | 45x34x8.5 mm | |
| Connector | | 2.4mm Female | |



Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +13V |
| RF Input Power | 0 dBm |
| Operating Temperature | 0 to +50C |
| Storage Temperature | -65 to +150C |

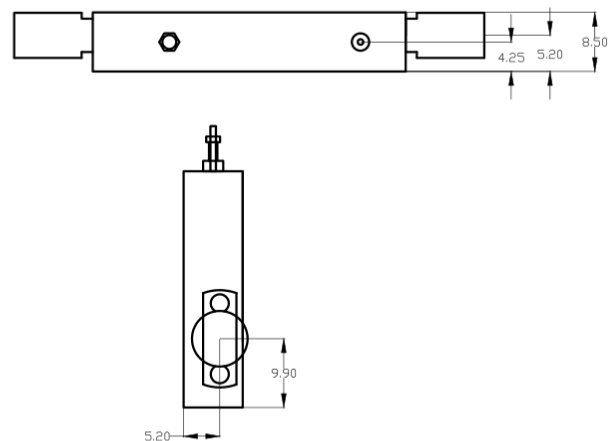
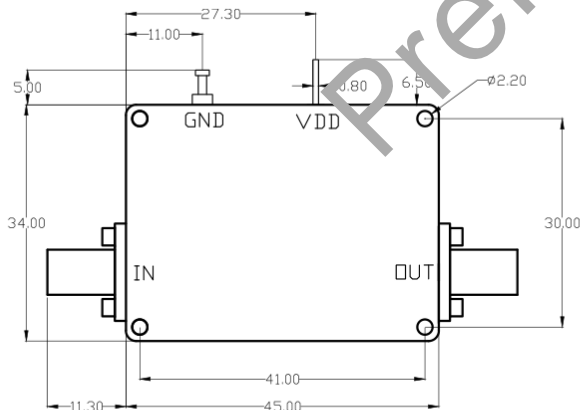
Caution:

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)



In millimetres

The 11.30 size marked is 1.85mm female connector

if use SMA female the size is 9.4 and 2.92mm female is 9.5

Heat Sink Required During Operation

