

40-60GHz Broadband Amplifier



Product Overview

AT-PA-4060-3820C is high power amplifier with +18dBm output power in the frequency of 40-60GHz. The DC power requirement is +5V/500mA. The module is with standard WR-19 waveguide. Other Connector can be available according to request.

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: 40-60GHz
- ✓ Psat:+20dBm
- ✓ Small signal gain: 38dB
- ✓ Single Power Supply

Application

- ✓ U Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

| Parameter | Min | Typical | Max |
|--------------------|-----|----------|-----|
| Frequency | | 40-60GHz | |
| Gain | 36 | 38dB | |
| Drain Supply | | +5V | +8V |
| P1dB | | +18dBm | |
| Psat | | +20dBm | |
| NF | | 5 dB | |
| Id(NO RF) | | 500 mA | |
| Id(Psat) | | 720mA | |
| Input Return Loss | | -7dB | |
| Output Return Loss | | -7dB | |
| Spec Temp | | 25C | |





AT-PA-4060-3820C

40-60GHz Medium Power Amplifier

Mechanical Information

| Item | Description |
|---------------------------|-------------|
| Input Port | WR-19 |
| Output Port | WR-19 |
| Case Material | Copper |
| Finish | Gold Plated |
| Weight (Without Heatsink) | 100g |
| Size: | 50x30x30 mm |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +9V |
| RF Input Power | +5dBm |
| 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.
3. Please contact AT Microwave team to make sure you have the most current data

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.



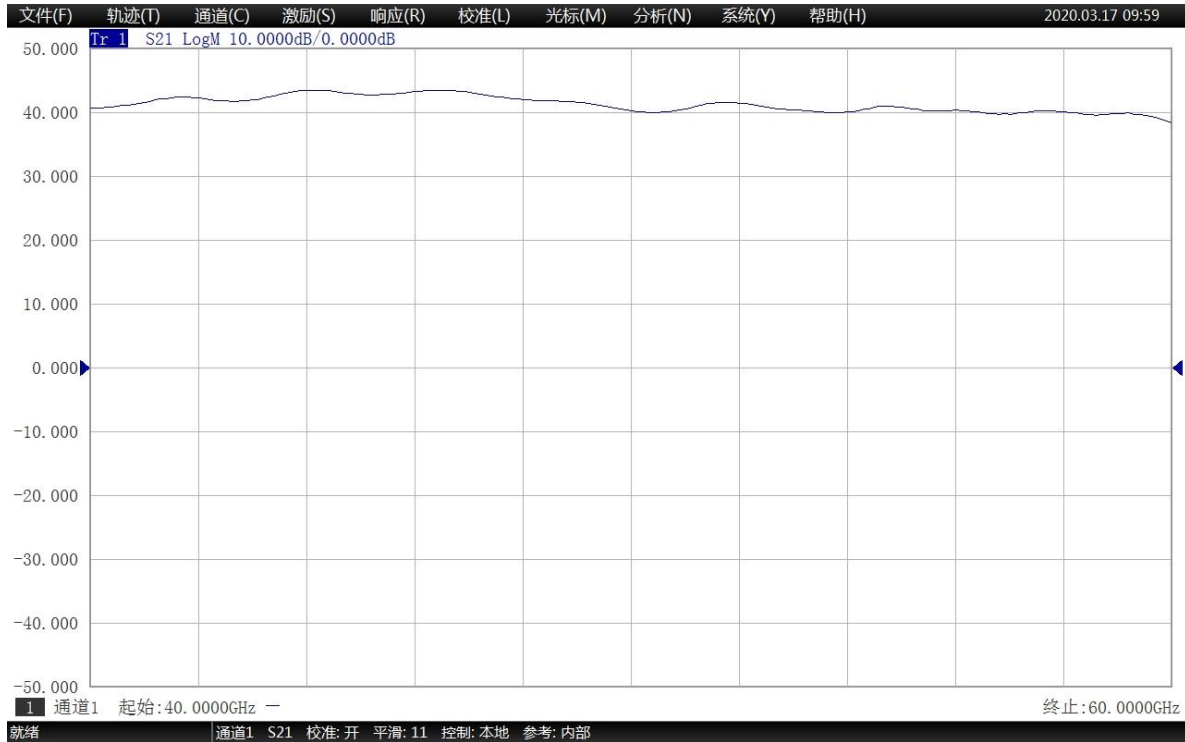


AT-PA-4060-3820C

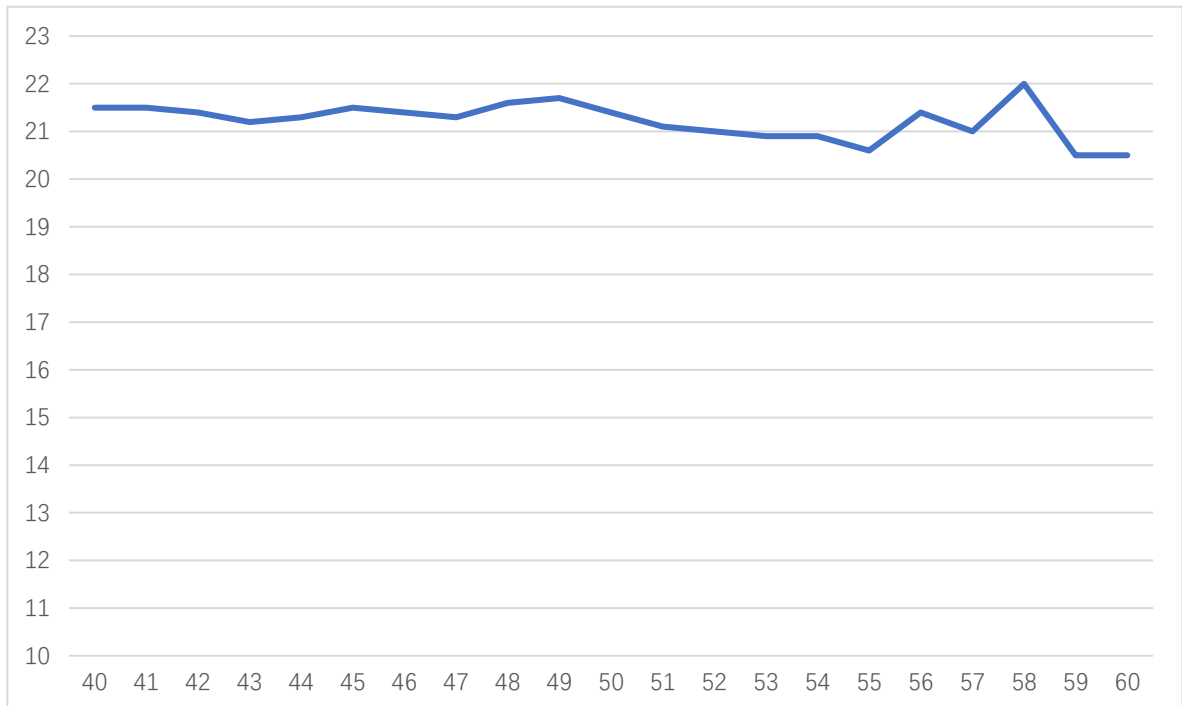
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Test Data:

Vd=+5V, Id=0.5A NO RF, Id=0.72A at Psat, 25C



Gain vs Frequency



Pout vs Frequency

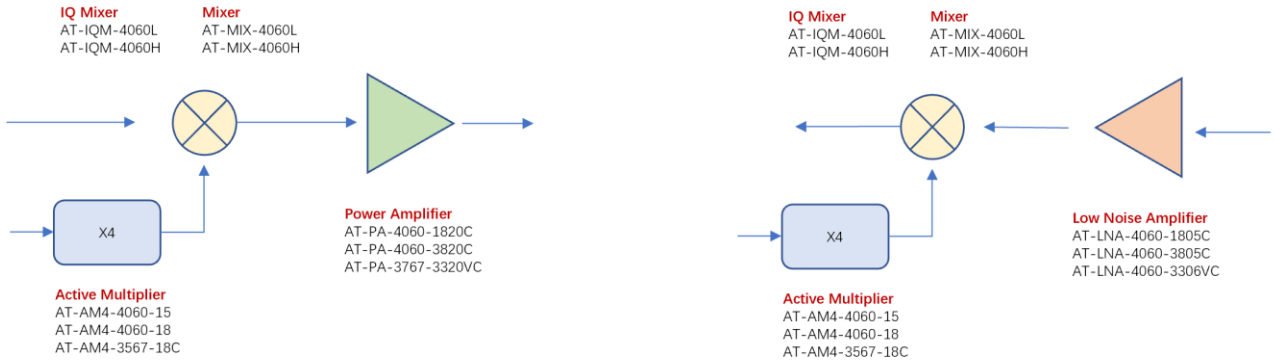




NF vs Frequency



U Band 40-60GHz



Dimension: (unit in mm)

