AT-LNA-4060-3306VC
40-60GHz Low Noise Amplifier

U Band Low Noise Amplifier

Product Overview

AT-LNA-4060-3306VC is a Low Noise Amplifier with 6dB Noise Figure in the frequency of 40-60GHz. The DC power requirement is +5V/300mA. The module is with 1.85mm Female.

AT Microwave can provide all kinds of coaxial low noise amplifiers, with frequency from 0.01-67GHz, gain from 20 to 60dB, Pout from +5 to +27dBm, and connectors from SMA to 1.85mm. If you don’t find what you need, just send us email sales@atmicrowave.com

Advantages

- Frequency: 40-60GHz
- Small signal gain: 33dB
- Noise Figure 6dB
- Single Power Supply

Application

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

Key Features

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typical</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>40-60GHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain</td>
<td>33dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NF</td>
<td>6dB</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>P1dB</td>
<td>+10dBm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drain Supply</td>
<td>+5V</td>
<td>+7V</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>300 mA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input VSWR</td>
<td>1.5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Output VSWR</td>
<td>1.5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Spec Temp</td>
<td>25C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Mechanical Information**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Port</td>
<td>1.85mm Female</td>
</tr>
<tr>
<td>Output Port</td>
<td>1.85mm Female</td>
</tr>
<tr>
<td>Case Material</td>
<td>Copper</td>
</tr>
<tr>
<td>Finish</td>
<td>Gold Plated</td>
</tr>
<tr>
<td>Weight (Without Heatsink)</td>
<td>50g</td>
</tr>
<tr>
<td>Size:</td>
<td>30x30x9.5 mm</td>
</tr>
</tbody>
</table>

**Absolute Maximum Ratings Table**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain Supply</td>
<td>+8V</td>
</tr>
<tr>
<td>RF Input Power</td>
<td>-20dBm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20 to +70C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-65 to +150C</td>
</tr>
</tbody>
</table>

**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.
Test Data:

Gain, Return Loss vs Frequency

1: 40.0000GHz 34.34dB
2: 45.0000GHz 35.02dB
3: 50.0000GHz 34.87dB
>4: 55.0000GHz 36.23dB
5: 60.0000GHz 37.80dB
**AT-LNA-4060-3306VC**

40-60GHz Low Noise Amplifier

**Dimension:** (unit in mm)

<table>
<thead>
<tr>
<th></th>
<th>&lt;26.5GHz</th>
<th>&lt;40GHz</th>
<th>&lt;50GHz</th>
<th>&lt;67GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector</td>
<td>SMA</td>
<td>2.92mm</td>
<td>2.4mm</td>
<td>1.85mm</td>
</tr>
<tr>
<td>Lenth of a</td>
<td>9.4mm</td>
<td>9.5mm</td>
<td>10.8mm</td>
<td>11.3mm</td>
</tr>
</tbody>
</table>

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