泰莱微波
Talent Microwave

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# Power Amplifier

## 40-67GHz/51dB Gain/24dBm Psat  Model: TLPA40G67G-51-24

TLPA40G67G-51-24 is a power amplifier with a typical small signal gain of 51 dB and a nominal Psat of 24 dBm across the frequency range of 40 to 67 GHz. The DC power requirement for the amplifier is +18 VDC/0.5 A. The input and output port configuration offers coax adapter structure with 1.85mm female.

## Features:

- Frequency range: 40-67GHz
- Gain: 51dB Typ
- Output Power Psat: 24dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

## Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

## Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency range | 40 | | 67 | GHz |
| Small Signal Gain | | 51 | | dB |
| Gain Flatness | | ±5 | | dB |
| Output Psat | | 24 | | dBm |
| Input VSWR | | 2 | | :1 |
| Output VSWR | | 2 | | :1 |
| DC Voltage | | 18 | | V DC |
| DC Supply Current | | 0.5 | | A |
| Impedance | | 50 | | Ohms |

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## Mechanical Specifications:

| Parameter | Value | Units |
|---|---|---|
| Input /Output Connector | 1.85mm Female/1.85mm Female | |
| DC Bias | Solder Pin | |
| Size | 52*44*13(Without Heatsink)<br>111*50*63(With Heatsink) | mm |

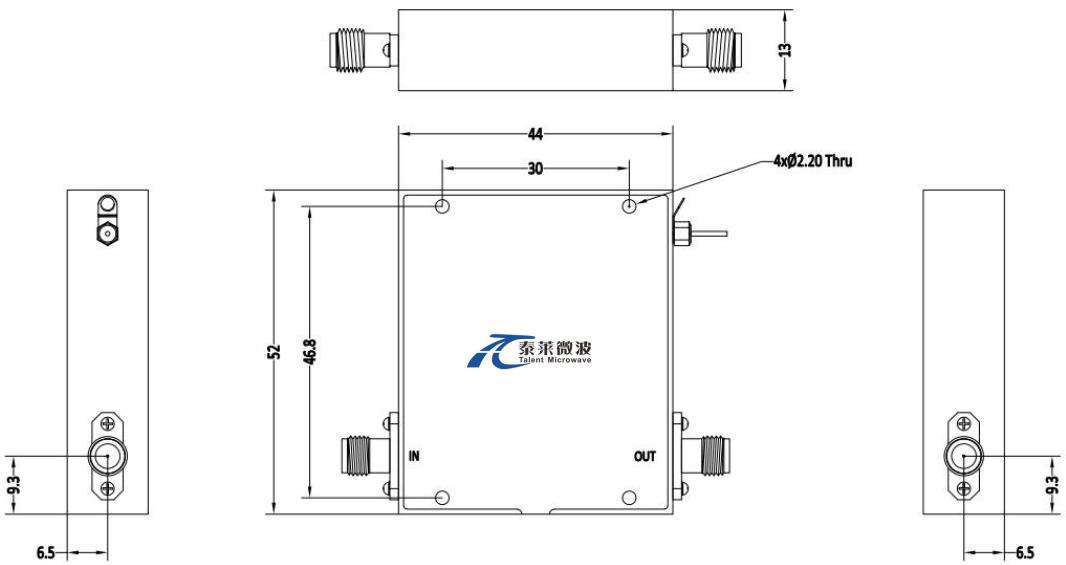
## Absolute Maximum Ratings:

| Parameter | Value |
|---|---|
| Supply Bias Voltage | +18 V |
| RF Input Power | -10 dBm |
| ESD sensitivity (HBm) | Class 0, passed 150V |

Simple 220V System
Available SAC option

## Outline Drawing:

Unit:mm




***Heat Sink Required During Operation

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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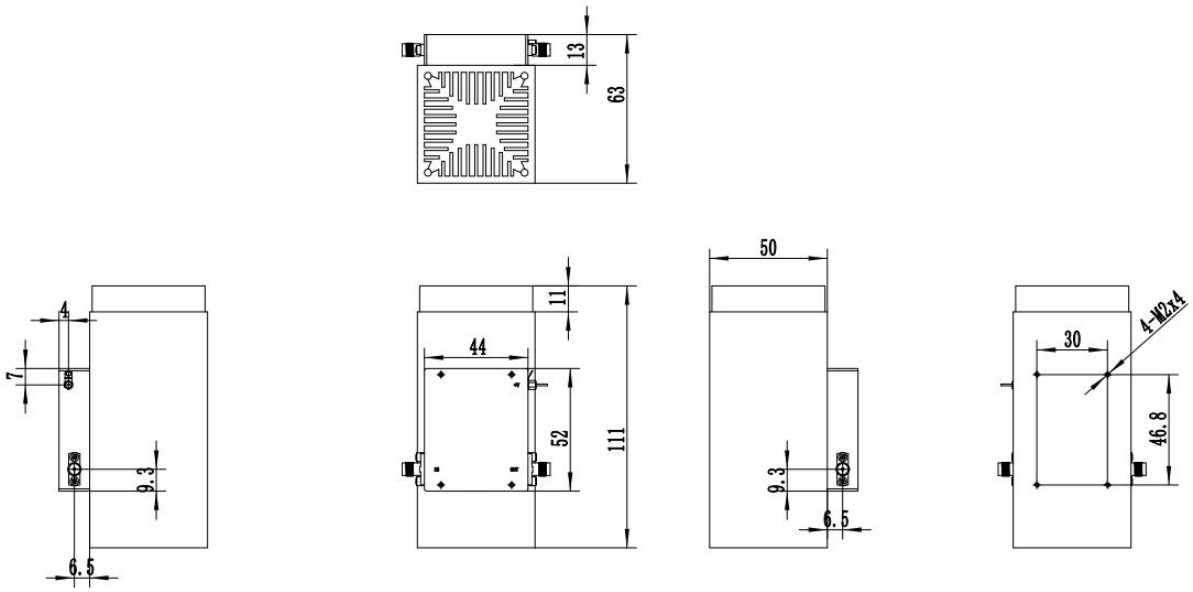
Unit:mm




## Environmental Conditions:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Operating Temperature* | -40 | | +60 | ℃ |
| Non-operating Temperature* | -50 | | +70 | ℃ |
| Relative humidity | | 95 | | % |
| Altitude | 10,000 | | | feet |
| Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis | | | |
| Shock(non operating) | 20G for 11msc half sin wave,3 axis both directions | | | |

*Note: For a wider temperature range, please consult the manufacturer.

## Ordering Information:

| Base Number | Description | Revision |
|---|---|---|
| TLPA40G67G-51-24 | Power amplifier 40-67GHz,Gain:51dB,Psat:24dBm, +18V DC,Without Heatsink | Rev.1.1 |
| TLPA40G67G-51-24-HS | Power amplifier 40-67GHz,Gain:51dB,Psat:24dBm, +18V DC,With Heatsink | Rev.1.1 |

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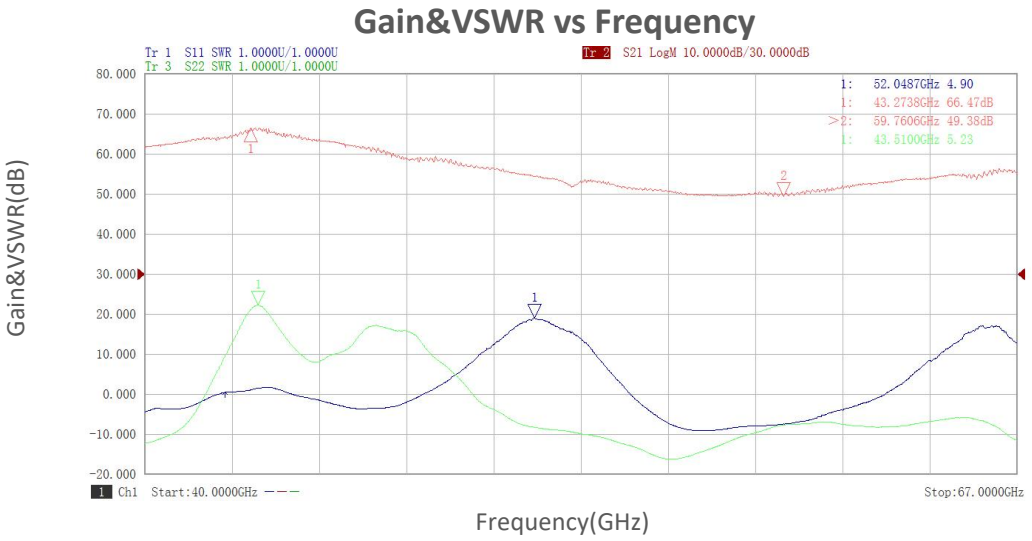
## Typical Performance Data:




Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.