泰莱微波
Talent Microwave

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# Low Noise Amplifier

## 18-27GHz/2.8dB NF/52dB Gain/8dBm P1dB  Model: TLLA18G27G-52-28

TLLA18G27G-52-28 is a low noise amplifier with a minimum small signal gain of 52 dB and a maximum noise figure of 2.8 dB across the frequency range of 18 to 27 GHz. The DC power requirement for the amplifier is +12 V DC/200 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 18-27GHz
- Gain: 52dB Min
- Noise Figure: 2.8dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Communication systems

### Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency range | 18 | | 27 | GHz |
| Small Signal Gain | 52 | | | dB |
| Gain Flatness | | ±0.6 | | dB |
| Noise Figure | | | 2.8 | dB |
| Output P1dB | 8 | | | dBm |
| Input VSWR | | | 2 | :1 |
| DC Voltage | | +12 | | V DC |
| DC Supply Current | | 200 | | mA |
| Impedance | 50 | | | Ohms |

### Mechanical Specifications:

| Parameter | Value | Units |
|---|---|---|
| Input /Output Connector | 2.92mm Female/2.92mm Female | |
| DC Bias | Solder Pin | |
| Size | 44.8*29.2*11 | mm |

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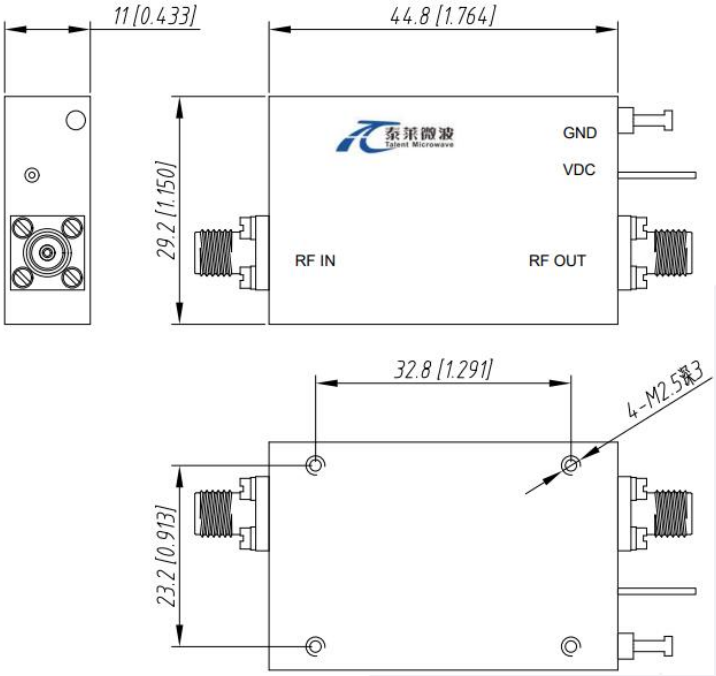
## Absolute Maximum Ratings:

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

Simple 220V System
Available SAC option

## Outline Drawing:

Unit:mm




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

***Heat Sink Required During Operation

## Environmental Conditions:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Operating Temperature | -45 | | +85 | ℃ |
| Non-operating Temperature | -55 | | +125 | ℃ |
| Relative humidity | | 95 | | % |
| Altitude | 50,000 | | | 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 | | | |

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## Ordering Information:

| Base Number | Description | Revision |
|---|---|---|
| TLLA18G27G-52-28 | Low Noise Amplifier, 18-27GHz, Noise Figure:2.8dB, Gain:52 dB,P1dB:8dBm,+12V DC,Without Heatsink | Rev.1.1 |
| TLLA18G27G-52-28-HS | Low Noise Amplifier, 18-27GHz, Noise Figure:2.8dB, Gain:52 dB,P1dB:8dBm,+12V DC,With Heatsink | Rev.1.1 |