

**Model: TLLA6G18G-20-40**
**Low Noise Amplifier**  
**6-18GHz, NF:4.0dB, Gain:24dB, P1dB:21dBm**
**Feature:**

- Ultra Wide Band: 6-18GHz
- Gain: 24dB Typ
- Noise Figure: 4.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

| 参数 Parameter           | Min  | Typ  | Max | 单位 Units |
|------------------------|------|------|-----|----------|
| 频率范围 Frequency range   | 6-18 |      |     | GHz      |
| 增益 Gain                | 20   | 24   |     | dB       |
| 增益平坦度 Gain Flatness    |      | ±0.5 | ±1  | dB       |
| 噪声系数 Noise Figure      |      | 4    |     | dB       |
| 线性输出功率 Output P1dB     | 20   | 21   |     | dBm      |
| 输出三阶交调 Output IP3      |      | 30   |     | dBm      |
| 输入驻波 Input VSWR        |      | 1.4  | 2   | :1       |
| 输出驻波 Output VSWR       |      | 1.3  | 2   | :1       |
| 直流电压 DC Voltage        |      | 12   |     | V DC     |
| 直流电流 DC Supply Current |      | 120  |     | mA       |
| 阻抗 Impedance           | 50   |      |     | Ohms     |

**机械特性 Mechanical Specifications:**

| 参数 Parameter                    | 指标 Value              | 单位 Units |
|---------------------------------|-----------------------|----------|
| 输入/输出接口 Input /Output Connector | SMA Female/SMA Female |          |
| 直流偏置 DC Bias                    | Solder Pin            |          |
| 尺寸 Size                         | 17*17*8               | mm       |
| 重量 Weight                       | /                     | g        |

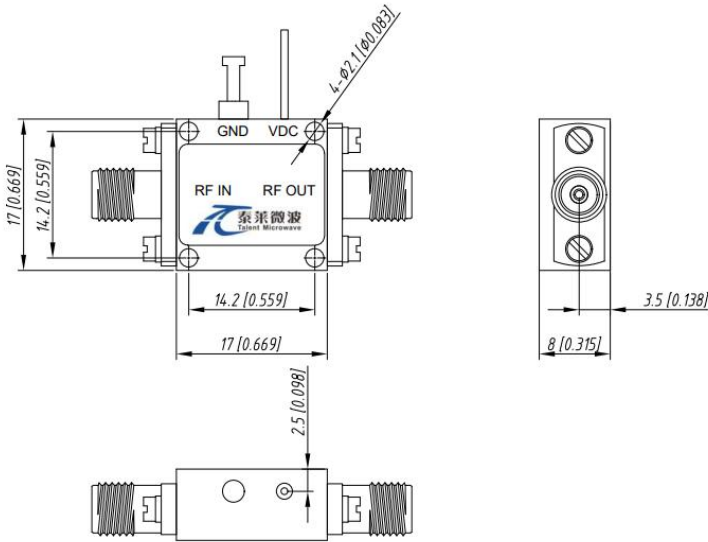
**绝对最大值 Absolute Maximum Ratings:**

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | TBD                  |
| 输入功率 RF Input Power          | 5 dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |


**Available 220V System  
 Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm(inches)



**\*\*\*Heat Sink Required During Operation**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

温度环境 Environmental Conditions:

| 参数 Parameter                       | Min   | Typ | Max  | 单位 Units |
|------------------------------------|---|-----|------|----------|
| 操作温度 Operating Temperature         | -45   |     | +85  | °C       |
| 存储温度 Non-operating Temperature     | -55   |     | +125 | °C       |
| 相对湿度 Relative humidity             |   | 95  |      | %        |
| 海拔 Altitude                        | 50,000  |     |      | feet     |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |      |          |
| 冲击 Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |     |      |          |

订货信息 Ordering Information:

| 标准型号 Part Number   | 描述 Description   | 版本号 Revision |
|--------------------|--|--------------|
| TLLA6G18G-20-40    | Low Noise Amplifier, 6-18GHz, Noise Figure:4.0dB, Gain:24 dB,P1dB:24dBm,+12V DC,Without Heatsink | Rev.1.1      |
| TLLA6G18G-20-40-HS | Low Noise Amplifier, 6-18GHz, Noise Figure:4.0dB, Gain:24 dB,P1dB:24dBm,+12V DC,With Heatsink    | Rev.1.1      |