

## Model: TMLA-060090-4540-12-N

## Low Noise Amplifier 60-90GHz, NF:4.0 dB, Gain:45 dB

### Feature:

- Ultra Wide Band: 60-90 GHz
- Gain: 45dB Typ
- Noise Figure:4.0dB Typ
- Unconditional stability

### 电气特性 Electrical Specifications:

| 参数Parameter            | Min | Typ | Max | 单位Units |
|------------------------|-----|-----|-----|---------|
| 频率范围 Frequency range   | 60  |     | 90  | GHz     |
| 增益 Gain                | 40  | 45  |     | dB      |
| 噪声系数 Noise Figure      |     | 4   | 5   | dB      |
| 输出功率1dB压缩点 Output P1dB | 6   | 9   |     | dBm     |
| 输入驻波 Input VSWR        |     | 3   |     | :1      |
| 输出驻波 Output VSWR       |     | 2   |     | :1      |
| 直流电压 DC Voltage        |     | +5  |     | V DC    |
| 直流供电 DC power supply   |     | 220 |     | mA      |

### 机械特性 Mechanical Specifications:

| 参数Parameter           | 指标 Value        | 单位Units |
|-----------------------|-----------------|---------|
| 输入接口 Input Connector  | WR-12/ UG-387/U |         |
| 输出接口 Output Connector | WR-12/ UG-387/U |         |
| 供电引脚 Power Supply Pin | Solder Pin      |         |
| 尺寸 Size               | /               | mm      |

### 绝对最大值 Absolute Maximum Ratings:

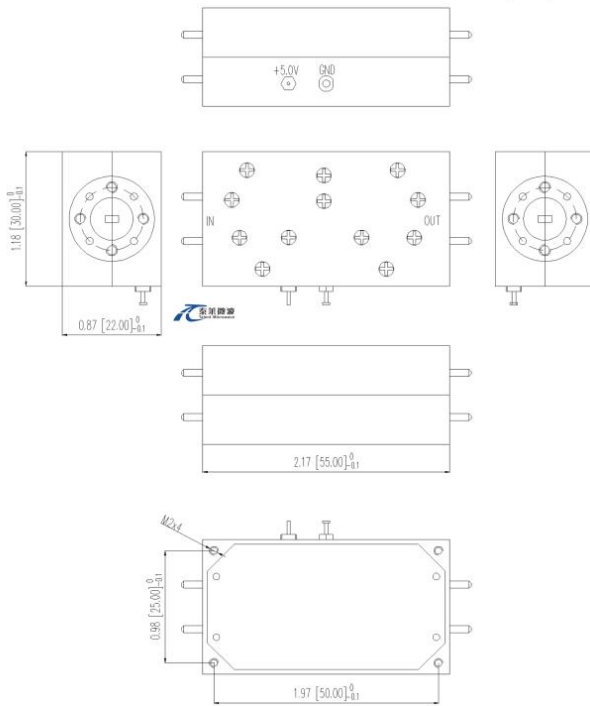
| 参数Parameter                  | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | +5 V                 |
| 输入功率 RF Input Power          | TBD                  |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |



Available 220V System  
Benchtop Amplifier

**外形尺寸 Outline Drawing:**

Unit: Inches(mm)



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         | -25   |     | +65  | °C      |
| 存储温度 Non-operating Temperature     | -45   |     | +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 |
|-----------------------|--|-------------|
| TMLA-060090-4540-12-N | Low Noise Amplifier,60-90GHz, Noise Figure:4.0dB, Gain:45dB,+5V DC,WR-12 | Rev.1.1     |