

## Power Amplifier

WR-10/90-94GHz/30dB Gain/36dBm Psat

Model: TMPA-090094-3036-10

TMPA-090094-3036-10 is a power amplifier with a typical small signal gain of 30 dB and a nominal Psat of 36 dBm across the frequency range of 90 to 94 GHz. The DC power requirement for the amplifier is +24 VDC/3.6 A. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M antcocking flanges.

### Features:

- Frequency range: 90-94GHz
- Gain: 30dB Typ
- Output Power Psat: 36dBm Typ
- Good Power and Gain Flatness

### Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

### 电气特性 Electrical Characteristics:

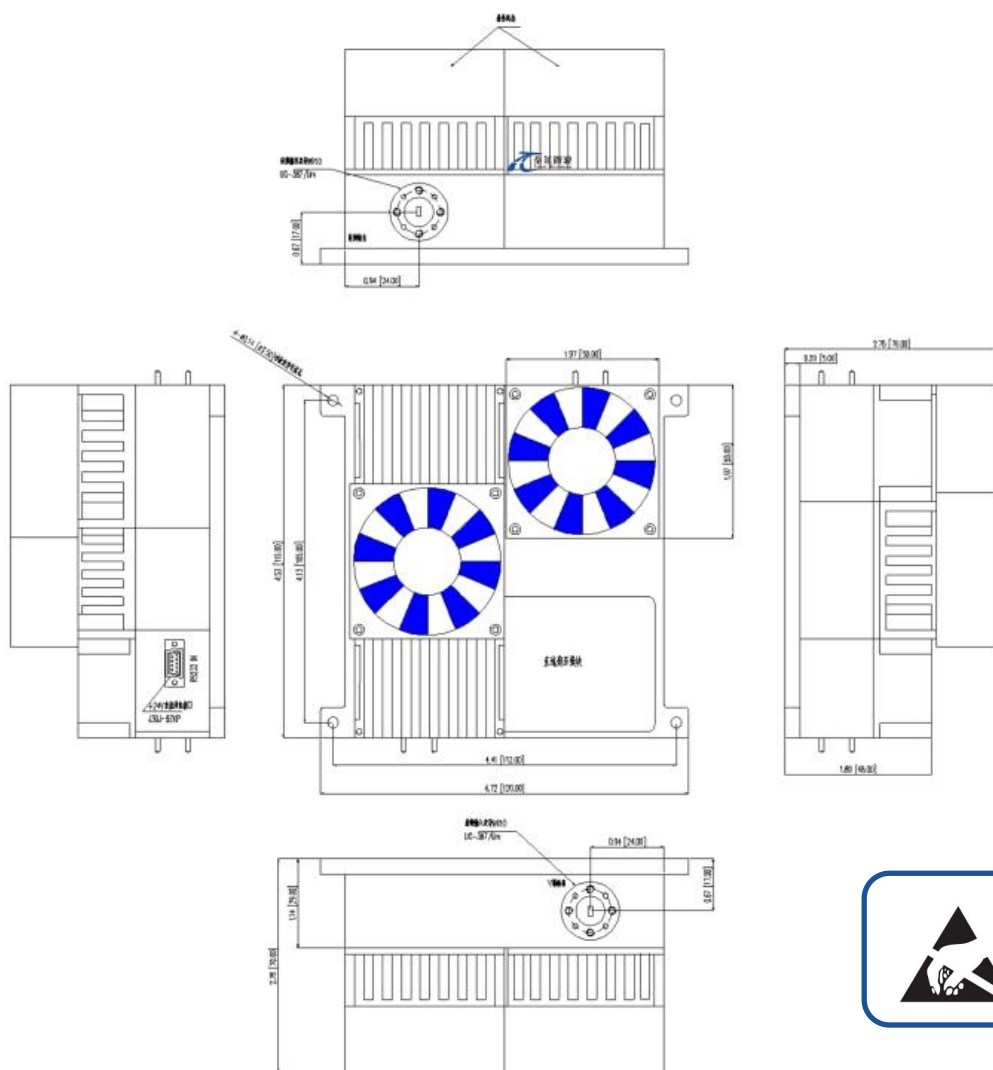
| 参数 Parameter            | Min | Typ | Max | 单位 Units |
|-------------------------|-----|-----|-----|----------|
| 频率范围 Frequency range    | 90  |     | 94  | GHz      |
| 小信号增益 Small Signal Gain | 28  | 30  |     | dB       |
| 饱和输出功率 Output Psat      | 35  | 36  |     | dBm      |
| 输入驻波 Input VSWR         |     | 2   |     | :1       |
| 直流电压 DC Voltage         |     | 24  |     | V DC     |
| 直流电流 DC Supply Current  |     | 3.6 |     | A        |

### 机械特性 Mechanical Specifications:

| 参数 Parameter                    | 指标 Value       | 单位 Units |
|---------------------------------|----------------|----------|
| 输入/输出接口 Input /Output Connector | WR-10/UG-387/U |          |
| 直流偏置 DC Bias                    | Solder Pin     |          |
| 尺寸 Size                         | 115*120*70     | mm       |

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

Unit:mm; Tolerance:±0.1mm



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

温度环境 Environmental Conditions:

| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature         | -10                                                 |     | +65 | ℃        |
| 存储温度 Non-operating Temperature     | -45                                                 |     | +85 | ℃        |
| 相对湿度 Relative humidity             |                                                     | 95  |     | %        |
| 海拔 Altitude                        | 10,000                                              |     |     | 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 Base Number    | 描述 Description                                                                            | 版本号 Revision |
|---------------------|-------------------------------------------------------------------------------------------|--------------|
| TMPA-090094-3036-10 | Power Amplifier, 90-94GHz, Gain: 30dB Type, Psat: 36dBm Type, +24V DC,WR-10, With heasink | Rev.1.1      |