

## Power Amplifier

27-32GHz/43dB Gain/43dBm Psat

Model: TLPA27G32G-43-43

TLPA27G32G-43-43 is a power amplifier with a minimum power gain of 43 dB and a minimum Psat of 43 dBm across the frequency range of 27 to 32 GHz. The DC power requirement for the amplifier is +22 VDC/7 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 27-32GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### 电气特性 Electrical Characteristics:

| 参数 Parameter           | Min   | Typ | Max | 单位 Units |
|------------------------|-------|-----|-----|----------|
| 频率范围 Frequency range   | 27-32 |     |     | GHz      |
| 功率增益 Power Gain        | 43    |     |     | dB       |
| 增益平坦度 Gain Flatness    |       | ±3  |     | dB       |
| 饱和输出功率 Output Psat     | 43    |     |     | dBm      |
| 杂散 Spurious@Pout=43dBm |       |     | -50 | dBc      |
| 输入驻波 Input VSWR        |       |     | 2   | :1       |
| 直流电压 DC Voltage        |       | 22  |     | V DC     |
| 直流电流 DC Supply Current |       | 7   | 8.5 | A        |
| 阻抗 Impedance           | 50    |     |     | Ohms     |

## 机械特性 Mechanical Specifications:

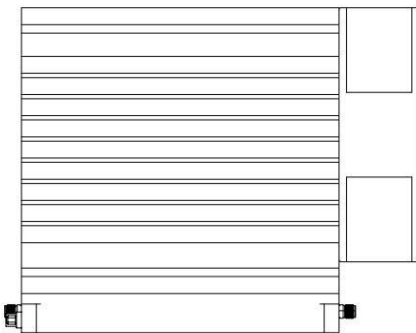
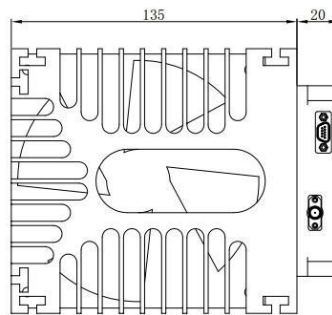
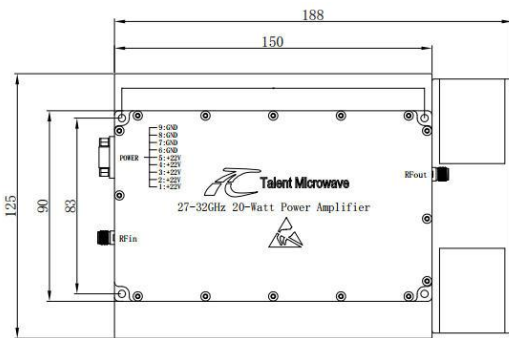
| 参数 Parameter                    | 指标 Value                                                  | 单位 Units                  |
|---------------------------------|-----------------------------------------------------------|---------------------------|
| 输入/输出接口 Input /Output Connector | 2.92mm Female/2.92mm Female                               |                           |
| 直流偏置 DC Bias                    | J30J-9ZKP                                                 | Pin1~5:+22V<br>Pin6~9:GND |
| 尺寸 Size                         | 150*90*20(Without heatsink)<br>188*125*155(with heatsink) | mm                        |
| 重量 Weight                       | 400                                                       | g                         |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | +24 V                |
| 输入功率 RF Input Power          | +5 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 外形图 Outline Drawing:

Unit:mm



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



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*        | -40                                                 |     | +50 | °C       |
| 存储温度 Non-operating Temperature*    | -50                                                 |     | +60 | °C       |
| 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  |     |     |          |

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

## 订货信息 Ordering Information:

| 标准型号 Base Number    | 描述 Description                                                             | 版本号 Revision |
|---------------------|----------------------------------------------------------------------------|--------------|
| TLPA27G32G-43-43    | Power amplifier 27-32GHz,<br>Gain:43dB,Psat:43dBm,+22V DC,Without Heatsink | Rev.1.1      |
| TLPA27G32G-43-43-HS | Power amplifier 27-32GHz,<br>Gain:43dB,Psat:43dBm,+22V DC,With Heatsink    | Rev.1.1      |