

**Model:TLPA0.5G6G-40-40**
**Power amplifier**
**0.5-6GHz, Gain:43dB, P1dB:38dBm, Psat:40dBm**
**Feature:**

- Ultra Wide Band: 0.5-6GHz
- Gain: 40dB Min
- Psat Output Power: 40dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical:**

| 参数Parameter             | Min.  | Typ. | Max. | 单位Units |
|-------------------------|-------|------|------|---------|
| 频率范围 Frequency range    | 0.5-6 |      |      | GHz     |
| 增益 Gain                 | 40    | 43   |      | dB      |
| 增益平坦度 Gain Flatness     |       | ±2.5 | ±3.5 | dB      |
| 线性输出功率P1dB              | 37    | 38   |      | dB      |
| 饱和输出功率 Psat             | 40    |      |      | dBm     |
| 谐波抑制 Harmonic Rejection | 13    | 15   |      | dB      |
| 杂散 Spurious             |       |      | -60  | dBc     |
| 输入驻波 Input VSWR         |       | 1.5  | 2.5  | :1      |
| 直流电压 DC Voltage         |       | 30   |      | V DC    |
| 直流电流 DC Supply Current  | 2     |      |      | A       |
| 阻抗 Impedance            | 50    |      |      | Ohms    |

**机械特性 Mechanical :**

| 参数Parameter                  | 指标 Value   | 单位Units |
|------------------------------|------------|---------|
| 输入输出接Input /Output Connector | SMA Female |         |
| 直流偏置 Bias                    | Solder Pin |         |
| 尺寸 Size                      | 125*95*12  | mm      |
| 重量 Weight                    | /          | g       |

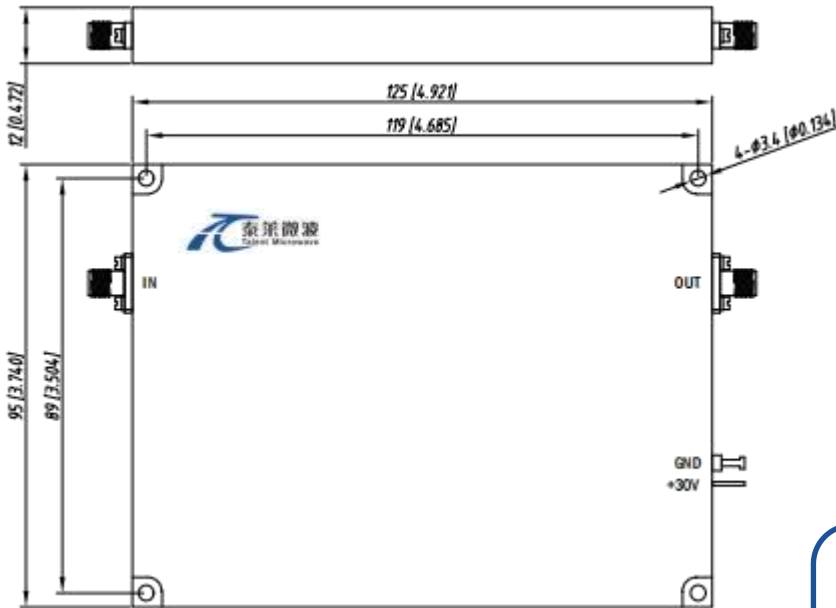

 Available 220V System  
 Benchtop Amplifier

**绝对最大值 Absolute Maximum Ratings:**

| 参数Parameter                  | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | +32 V                |
| 输入功率 RF INPUT POWER          | +8 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

**外形尺寸 Outline Drawing:**

Unit: mm(inches)



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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

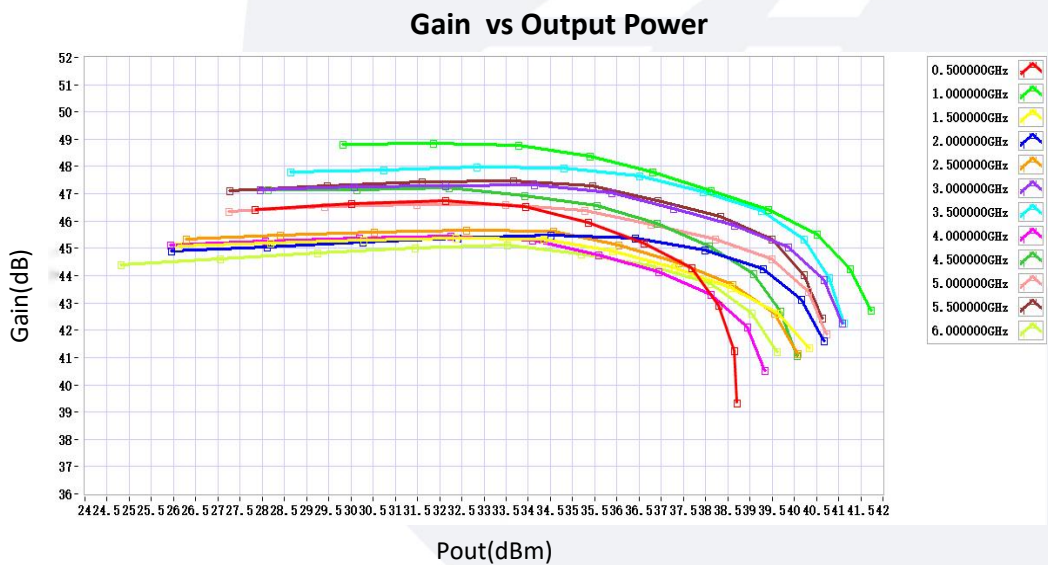
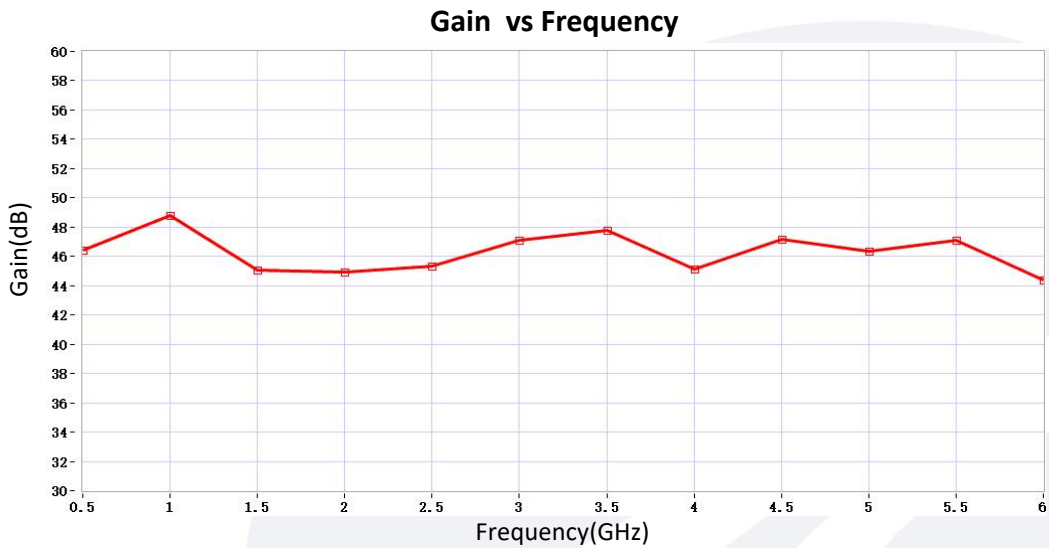
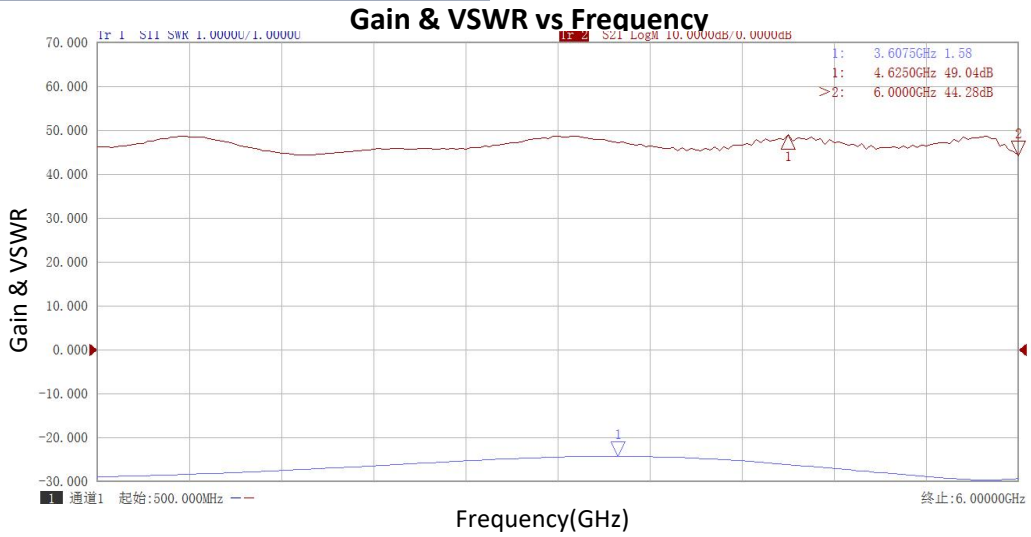
**温度环境 Environmental Conditions:**

| 参数Parameter                        | Min.   | Typ. | Max. | 单位Units |
|------------------------------------|--|------|------|---------|
| 操作温度 Operating Temperature         | -30  |      | +70  | °C      |
| 存储温度 Non-operating Temperature     | -45  |      | +85  | °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:**

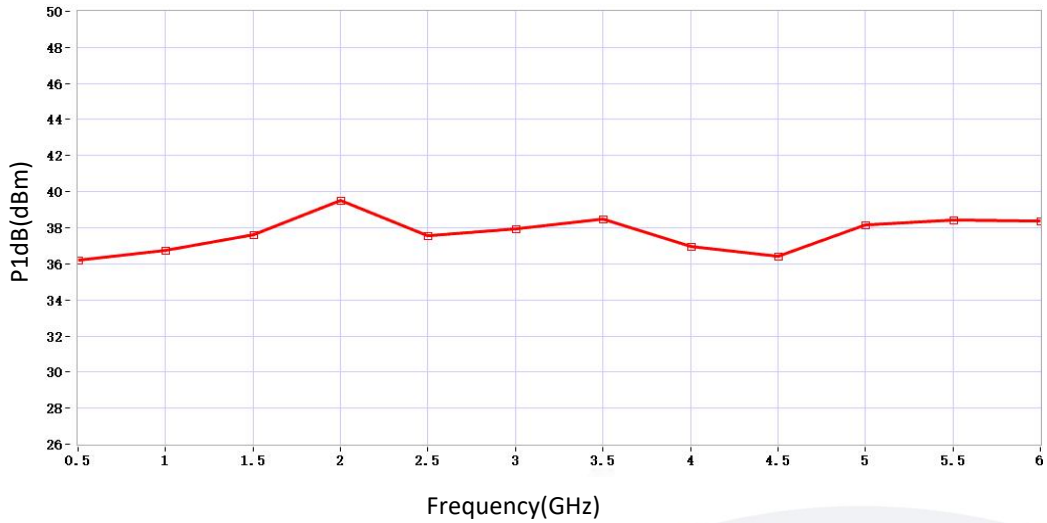
| 标准型号 Part Number    | 描述 Description  | 版本号Revision |
|---------------------|---|-------------|
| TLPA0.5G6G-40-40    | Power amplifier 0.5-6GHz,Gain:43dB,P1dB:38dBm,30V DC,Without Heatsink | Rev.1.0     |
| TLPA0.5G6G-40-40-HS | Power amplifier 0.5-6GHz,Gain:43dB,P1dB:38dBm,30V DC,With Heatsink    | Rev.1.0     |

典型曲线 Typical Performance Data:



典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

