

**Model:TLPA6G40G-28-20**
**Power Amplifier**  
**6-40GHz, Gain:28dB, Psat:22dBm**
**Feature:**

- Ultra Wide Band: 6-40GHz
- Gain:26dB Min
- Psat Output Power:22dBm 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   | 6-40 |     |     | GHz     |
| 增益 Gain                | 26   | 28  |     | dB      |
| 增益平坦度 Gain Flatness    |      | ±2  |     | dB      |
| 饱和输出功率 Output Psat     |      | 22  |     | dBm     |
| 杂散 Spurious            |      | -60 |     | dBc     |
| 噪声系数 Noise Figure      |      | 6   |     | dB      |
| 输入驻波 Input VSWR        |      | 1.7 | 2.3 | :1      |
| 输出驻波 Output VSWR       |      | 1.7 | 2.3 | :1      |
| 直流电压 DC Voltage        |      | +12 |     | V DC    |
| 直流电流 DC Supply Current |      | 255 |     | 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 | 2.92 Female/2.92 Female |         |
| 直流偏置 DC Bias                   | Solder Pin              |         |
| 尺寸 Size                        | 44*36*12                | mm      |
| 重量 Weight                      | /                       | g       |

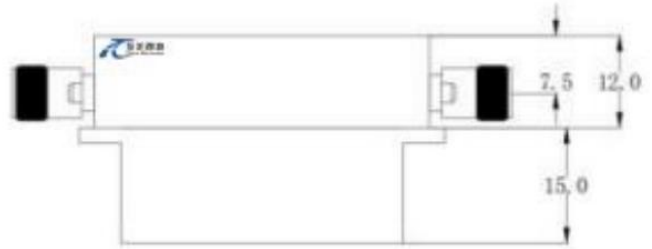
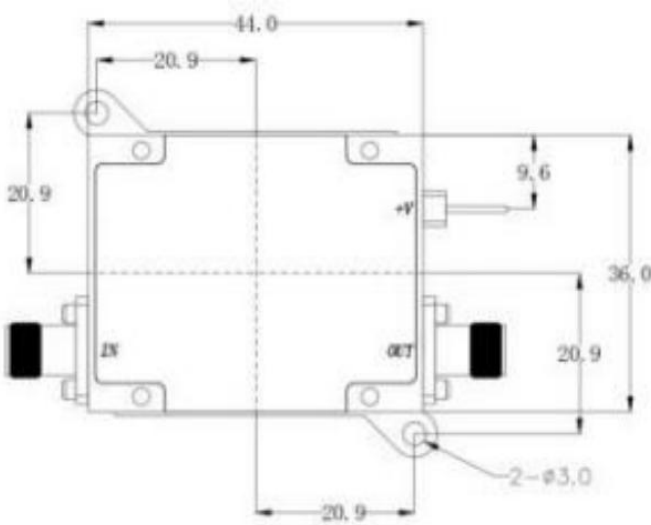
**绝对最大值 Absolute Maximum Ratings:**

| 参数Parameter                  | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | +13V                 |
| 输入功率 RF Input Power          | 10dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |


**Available 220V System  
Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



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

温度环境 Environmental Conditions:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

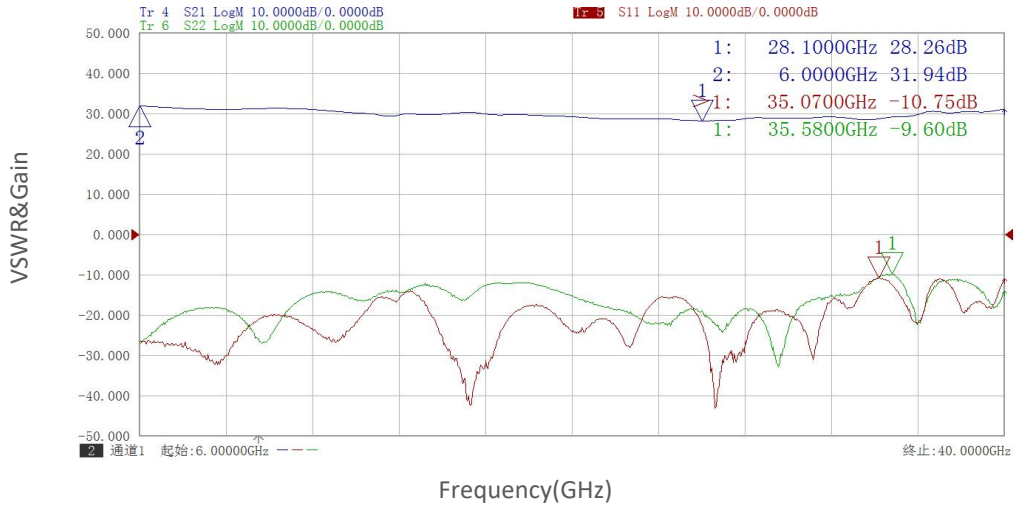
| 参数Parameter                        | Min   | Typ | Max  | 单位Units |
|------------------------------------|---|-----|------|---------|
| 操作温度 Operating Temperature         | -45   |     | +85  | °C      |
| 存储温度 Non-operating Temperature     | -55   |     | +125 | °C      |
| 相对湿度 Relative humidity             |   | 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:

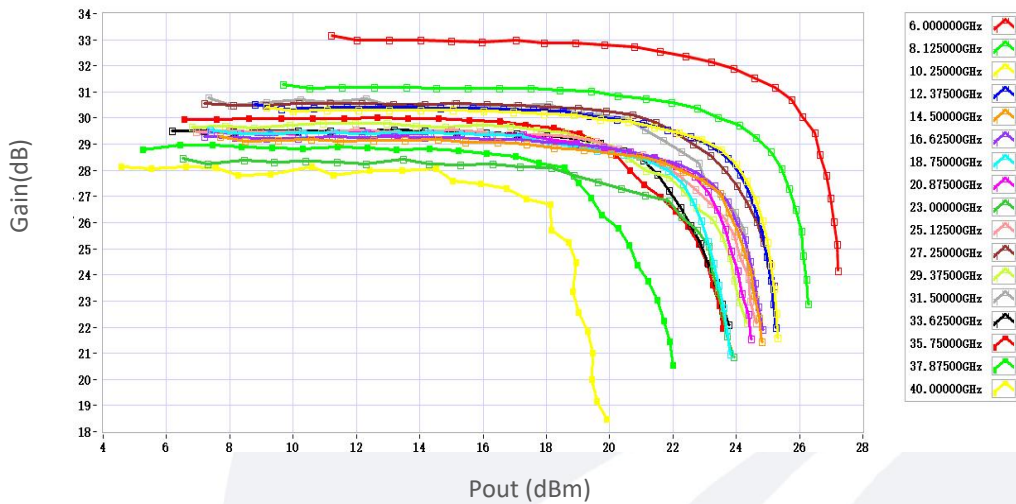
| 标准型号 Part Number   | 描述 Description   | 版本号Revision |
|--------------------|--|-------------|
| TLPA6G40G-28-20    | Power amplifier 6-40GHz,Gain:28dB,Psat:22dBm,+12V DC,Without Heatsink. | Rev.1.1     |
| TLPA6G40G-28-20-HS | Power amplifier 6-40GHz,Gain:28dB,Psat:22dBm,+12V DC,With Heatsink.    | Rev.1.1     |

典型曲线 Typical Performance Data:

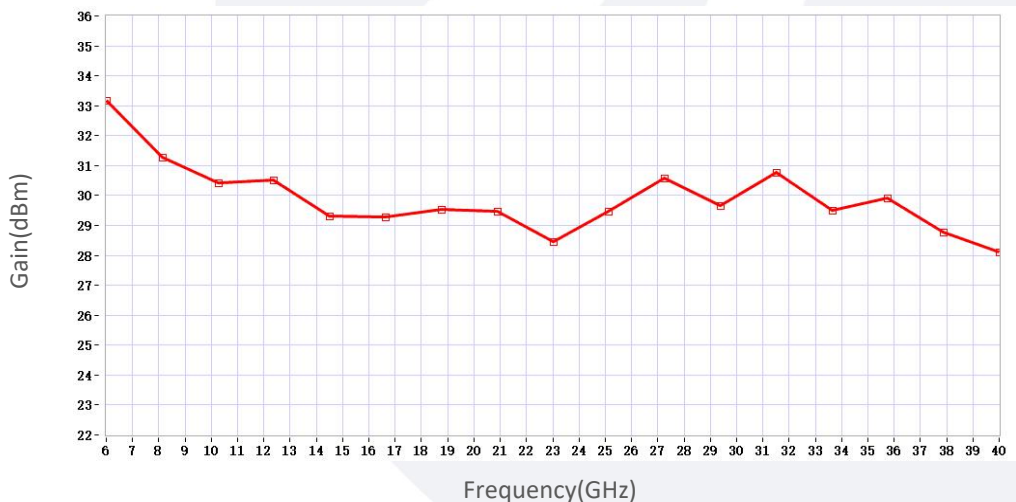
**VSWR&Gain vs Frequency**



**Gain vs Output Power**

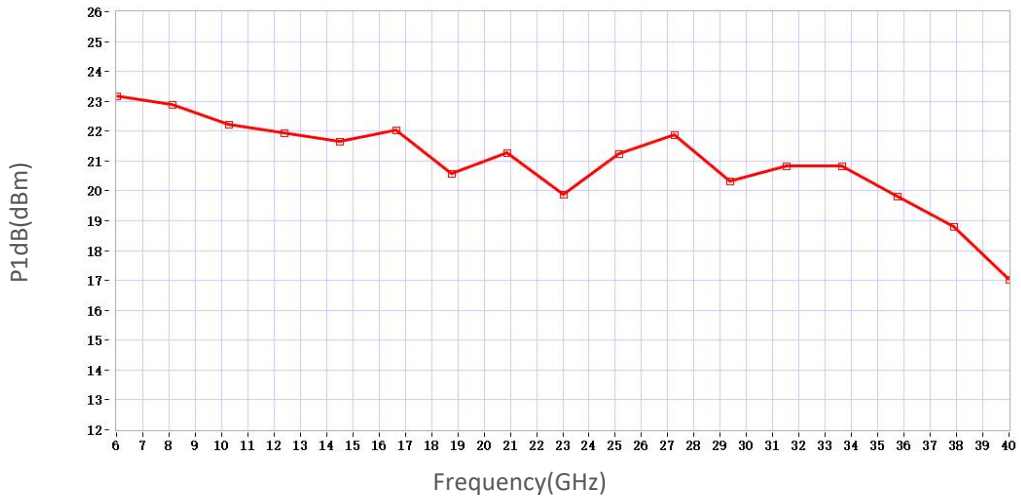


**Gain vs Frequency**



典型曲线 Typical Performance Data:

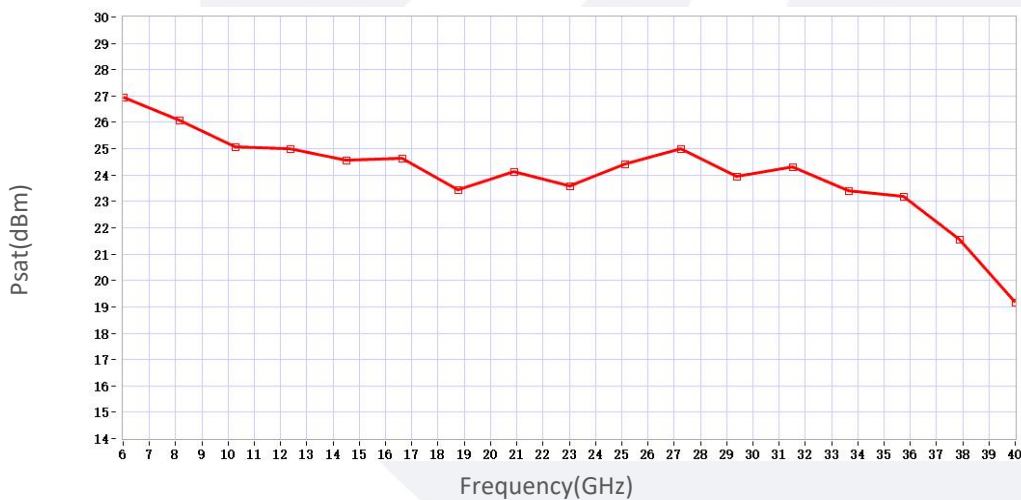
**P1dB vs Frequency**



**P3dB vs Frequency**

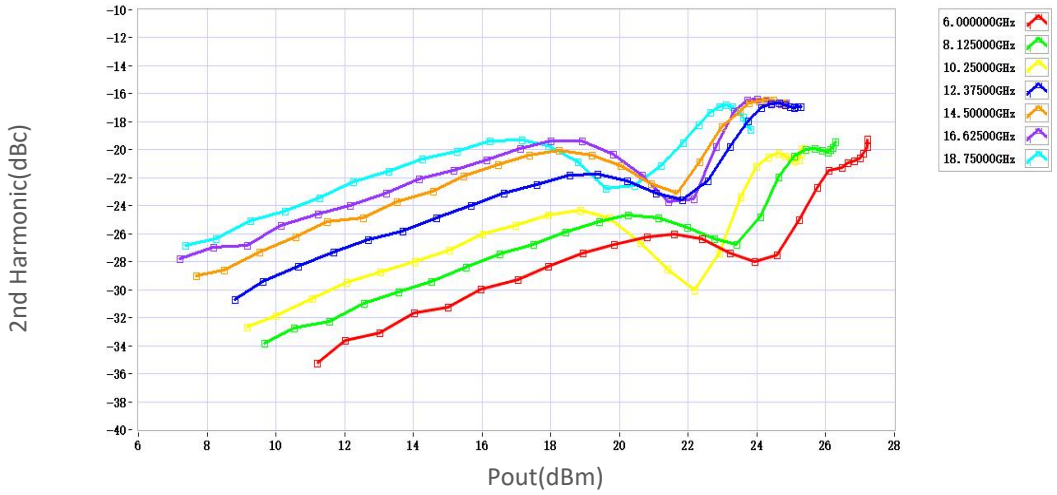


**Psat vs Frequency**



典型曲线 Typical Performance Data:

2nd Harmonic vs Output Power



3rd Harmonic vs Output Power

