

# Solid State High Power Amplifier Systems

## 26.5-40GHz /57dB Gain/57 dBm Psat/380V AC

Model: TLPA26.5G40G-57-57-BC

TLPA26.5G40G-57-57-BC is a solid state high power amplifier systems provides high output power and high gain across the 26.5 to 40 GHz frequency range. The amplifier features a built-in 380V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Wide Band: 26.5-40GHz
- Gain: 57dB Min
- Psat Output Power:57dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

电气特性 Electrical Characteristics:

| 参数 Parameter         | 代码 Symbol | Min       | Typ | Max | 单位 Units |
|----------------------|-----------|-----------|-----|-----|----------|
| 频率范围 Frequency range | BW        | 26.5-40   |     |     | GHz      |
| 功率增益 Power Gain      | GP        | 57        |     |     | dB       |
| 增益平坦度 Gain flatness  | ΔGL       |           | ±5  |     | dB       |
| 饱和输出功率 Output Psat   | Psat      | 57        |     |     | dBm      |
| 杂散 Spurious          | Spur      |           |     | -60 | dBc      |
| 谐波 Harmonics         | HAM       |           |     | -20 | dBc      |
| 输入驻波 Input VSWR      | VSWRin    |           |     | 2   | :1       |
| 交流电压 AC Voltage      | Vac       |           | 380 |     | V AC     |
| 功耗 Power Consumption | Pdiss     | 12500@Max |     |     | W        |
| 阻抗 Impedance         | I/O-IMP   | 50        |     |     | Ohms     |

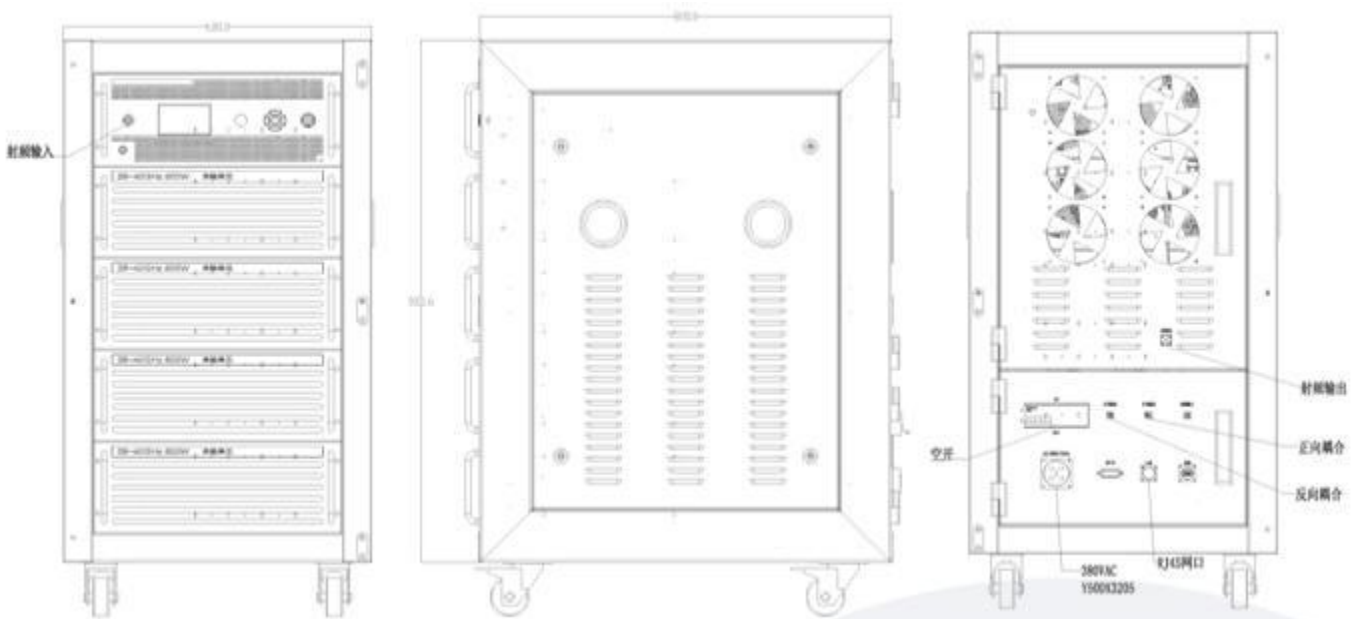
机械特性 Mechanical Specifications:

| 参数 Parameter                         | 指标 Value                     | 单位 Units |
|--------------------------------------|------------------------------|----------|
| 输入/输出接口 Input /Output Connector      | 2.92 Female/WR-28            |          |
| 正向/反向耦合 Forward/Reverse Coupling     | 2.92mm Female/ 2.92mm Female |          |
| 通信接口 Communication Connector         | RJ45/DB9                     |          |
| 液晶显示屏 Front Panel LCD Screen Display | 7 inch LCD Screen Display    |          |
| 尺寸 Size                              | 20U                          |          |
| 重量 Weight                            | 250                          | Kg       |

绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 输入功率 RF Input Power          | 0 dBm                |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

外形图 Outline Drawing: Unit:mm



## 主要功能 Key Features:

| 参数 Parameter                | 特点 Advantages                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------|
| 控制 Control                  | RS422/LAN, LCD Screen Display                                                            |
| 内置保护功能 Protection functions | 1,Over TEM<br>2,Over voltage<br>3,Over current<br>4,Over VSWR                            |
| 控制功能 Control functions      | 1,Power setting On/Off<br>2,ALC                                                          |
| 冷却系统 Cooling system         | Front to back forced air cooling fans makes this ideal for usage in test equipment racks |

## 温度环境 Environmental Conditions:

| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature*        | -20                                                 |     | +50 | °C       |
| 存储温度 Non-operating Temperature*    | -40                                                 |     | +65 | °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  |     |     |          |

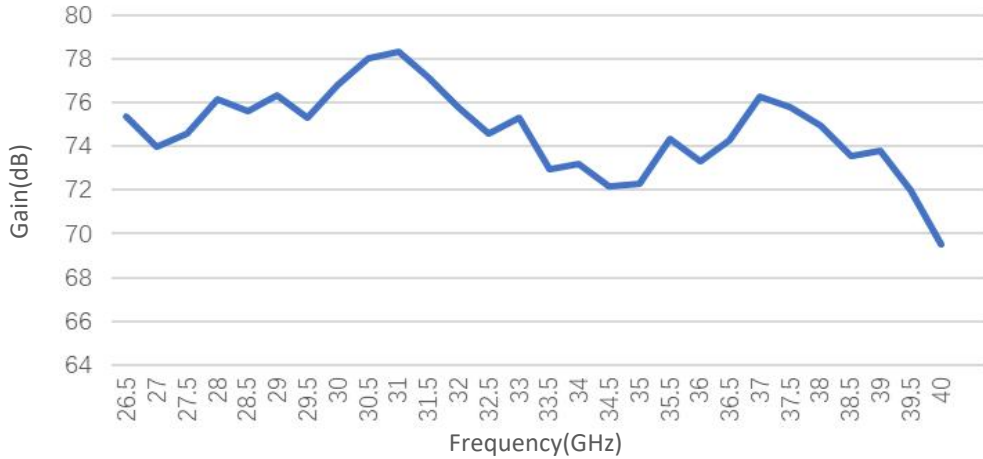
\*Note: For a wider temperature range, please consult the manufacturer.

## 订货信息 Ordering Information:

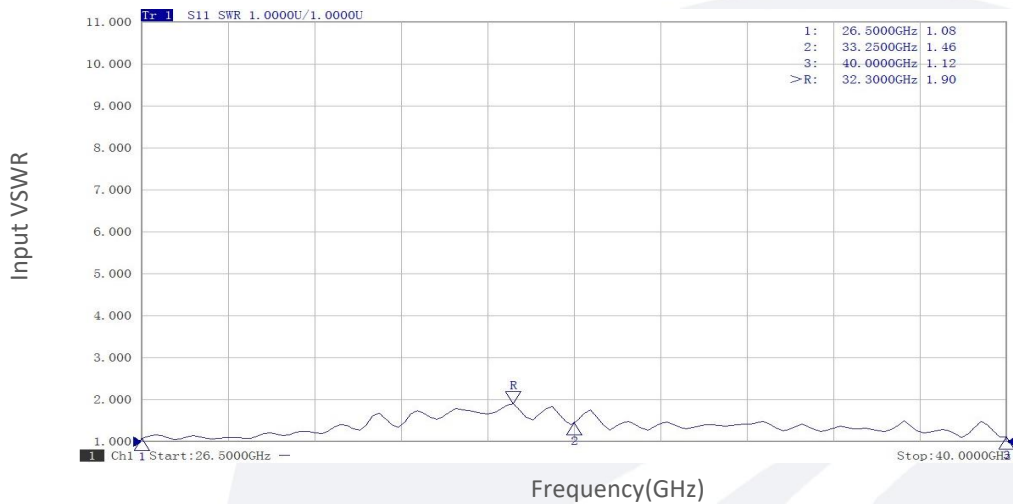
| 标准型号 Base Number      | 描述 Description                                                                                        | 版本号 Revision |
|-----------------------|-------------------------------------------------------------------------------------------------------|--------------|
| TLPA26.5G40G-57-57-BC | Solid State High Power Amplifier Systems 26.5-40GHz,Gain:57dB,Psat:57dBm,380V AC,Built in Fan Cooling | Rev.1.1      |

## 典型曲线 Typical Performance Data:

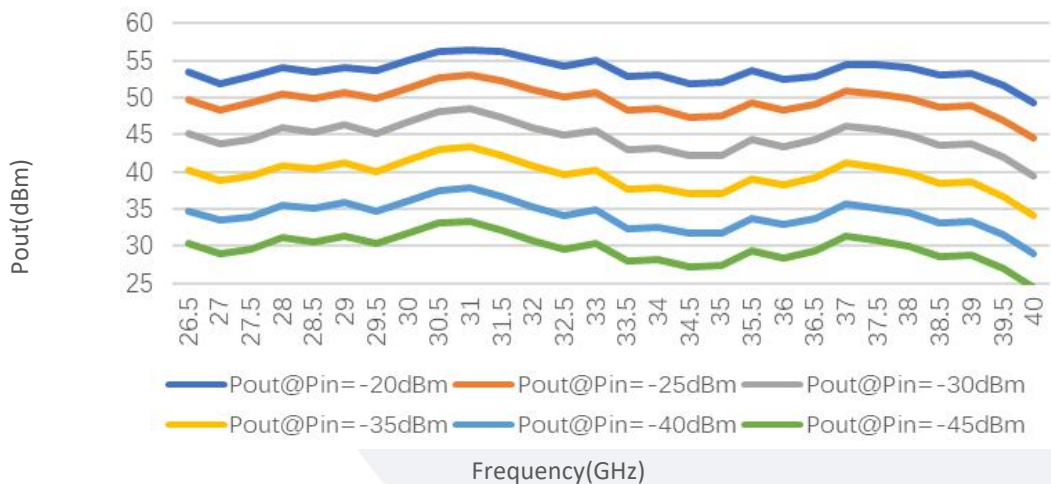
### Gain vs Frequency



### Input VSWR vs Frequency



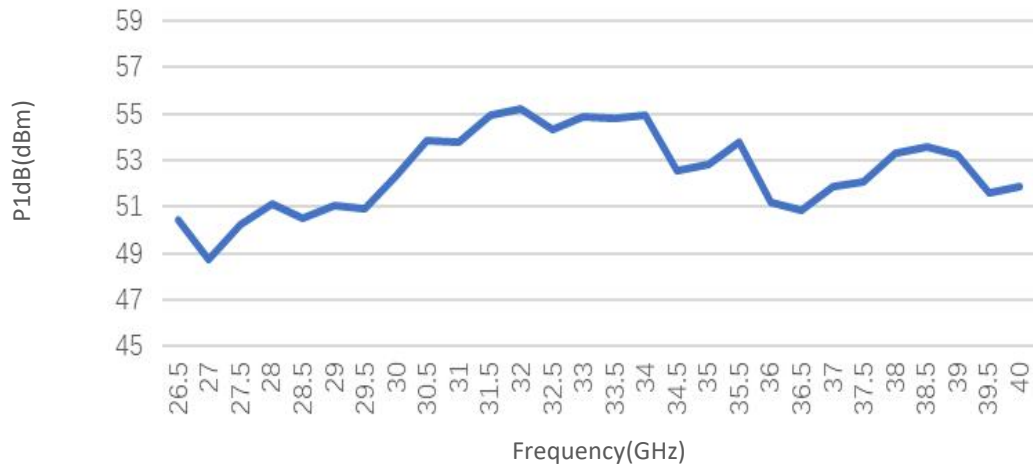
### Pout@Equal\_Pin



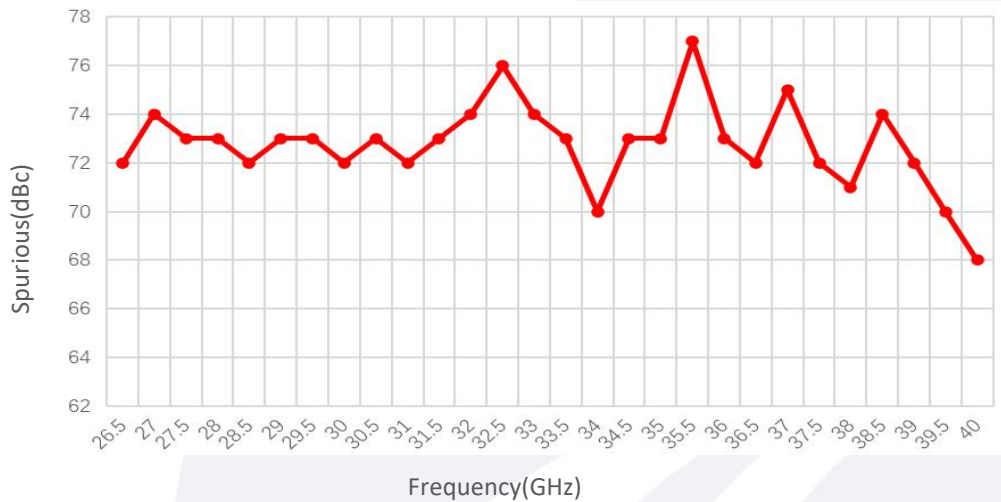
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

## 典型曲线 Typical Performance Data:

### P1dB vs Frequency



### Spurious vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.