

Model: TLPA18G40G-45-40-HS
Power Amplifier
18-40GHz, Gain: 45dB, Psat: 40dBm
Feature:

- Ultra Wide Band: 18-40GHz
- Gain: 45dB Typ
- Psat Output Power: 40dBm 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 | 18-40 | | | GHz |
| 增益 Gain | 40 | 45 | | dB |
| 增益平坦度 Gain Flatness | | ±4 | ±5 | dB |
| 饱和输出功率 Output Psat | 37 | 40 | | dBm |
| 杂散 Spurious | | -60 | | dBc |
| 输入驻波 Input VSWR | | 2 | | :1 |
| 直流电压 DC Voltage | | +18 | | V DC |
| 直流电流 DC Supply Current | | 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 | 2.92 Female/2.92 Female | |
| 直流偏置 DC Bias | Solder Pin | |
| 尺寸 Size | 132*165*49.5 | mm |
| 重量 Weight | / | g |

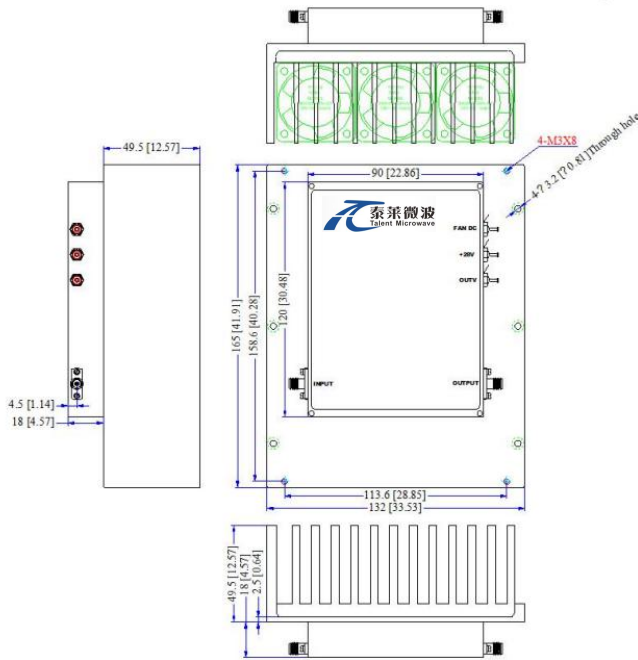
绝对最大值 Absolute Maximum Ratings:

| 参数Parameter | 指标 Value |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage | +20V |
| 输入功率 RF Input Power | 0dBm |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |


**Available 220V System
Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



温度环境 Environmental Conditions:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|------------------------------------|-----|--|-----|----------|
| 操作温度 Operating Temperature* | -40 | | +60 | °C |
| 存储温度 Non-operating Temperature* | -50 | | +70 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | | 10,000 | | feet |
| 震动 Shock / Vibration(MIL-STD-810F) | | 20g,11ms,saw-tooth | | |
| 冲击 Shock(non operating) | | 20G for 11msc half sin wave,3 axis both directions | | |

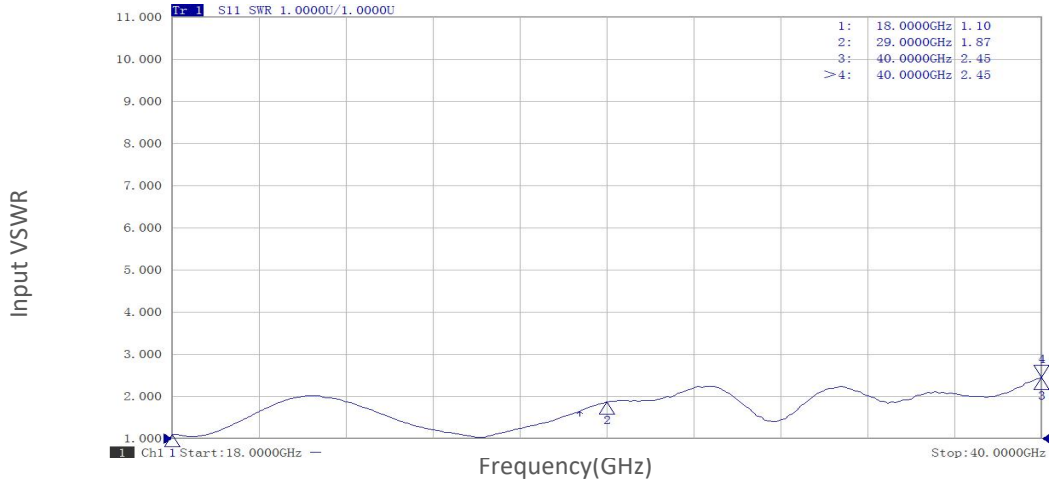
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

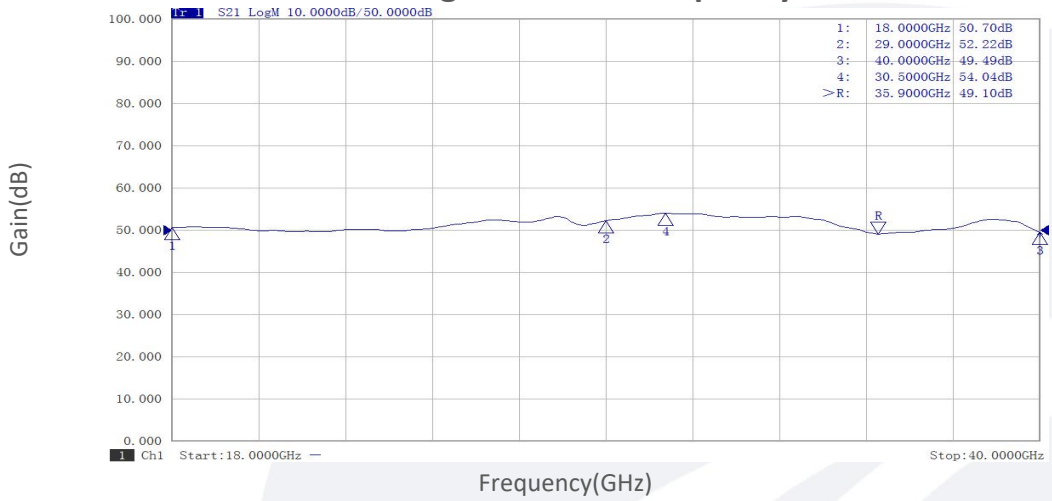
| 标准型号 Part Number | 描述 Description | 版本号 Revision |
|---------------------|---|--------------|
| TLPA18G40G-45-40 | Power amplifier 18-40GHz, Gain:45dB, Psat:40dBm, +18V DC, Without Heatsink. | Rev.1.1 |
| TLPA18G40G-45-40-HS | Power amplifier 18-40GHz, Gain:45dB, Psat:40dBm, +18V DC, With Heatsink. | Rev.1.1 |

典型曲线 Typical Performance Data:

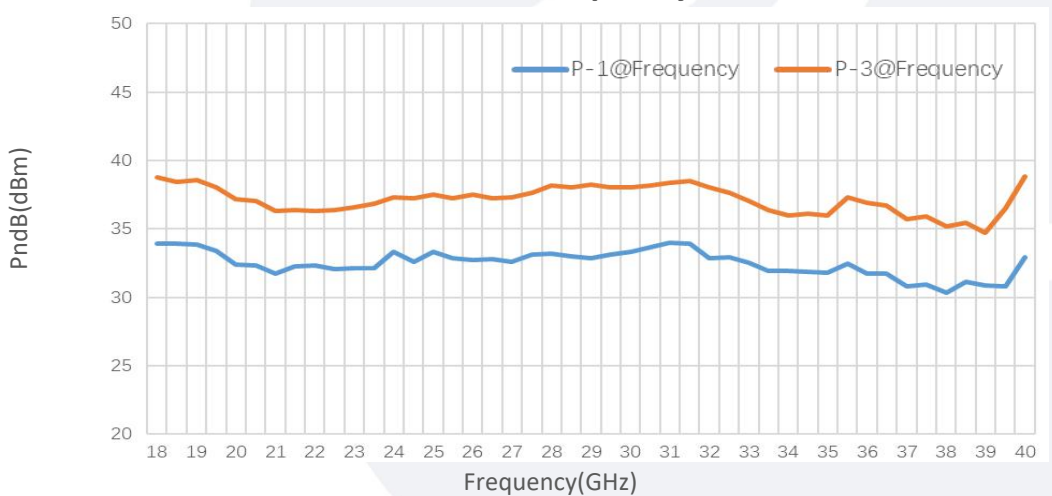
Input VSWR vs Frequency



Small Signal Gain vs Frequency



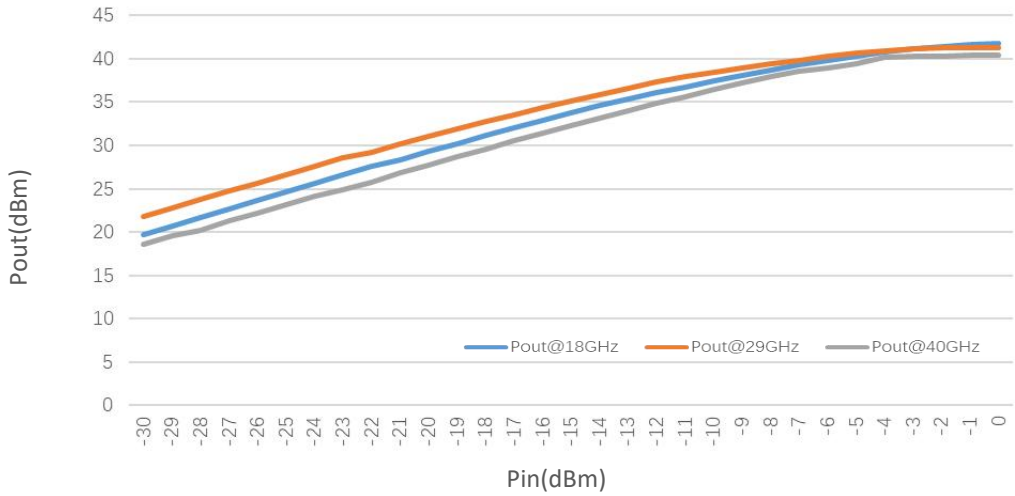
PndB vs Frequency



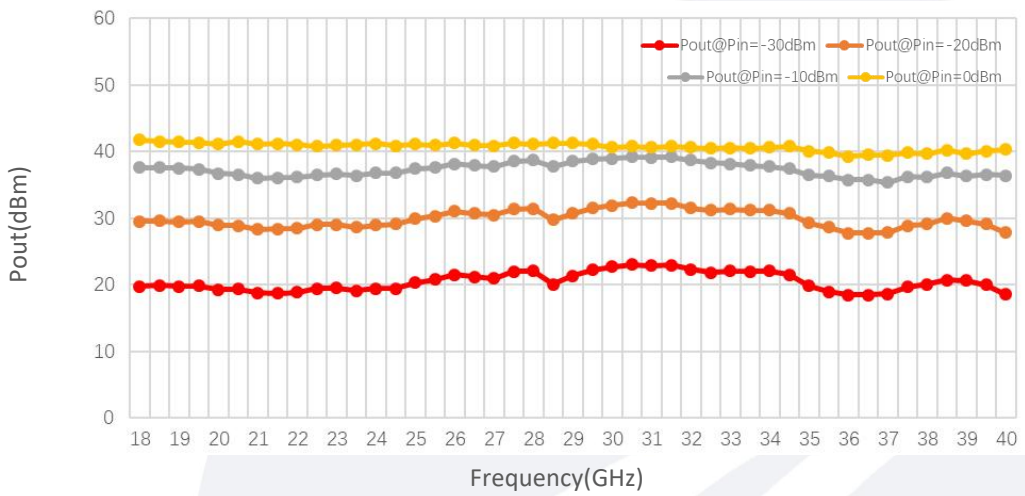
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

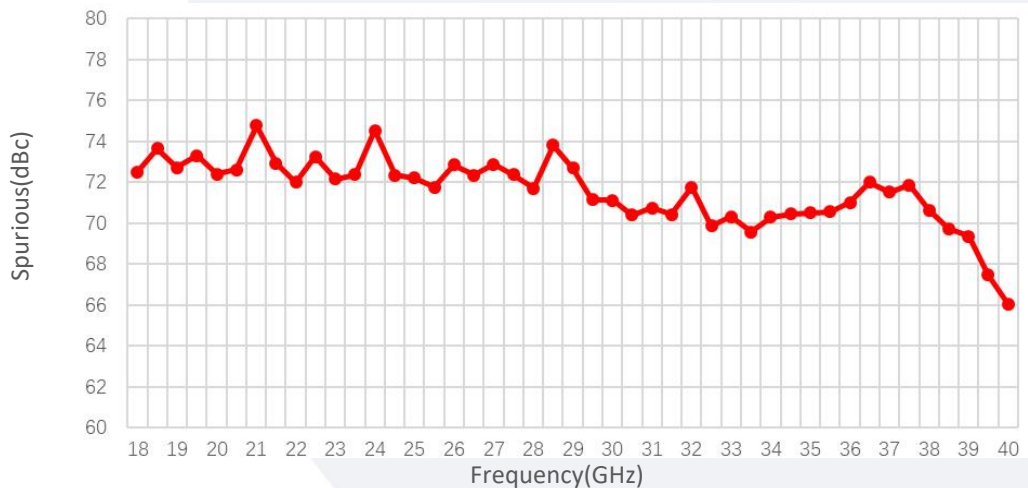
Pout@Pin



Pout@Equal_Pin



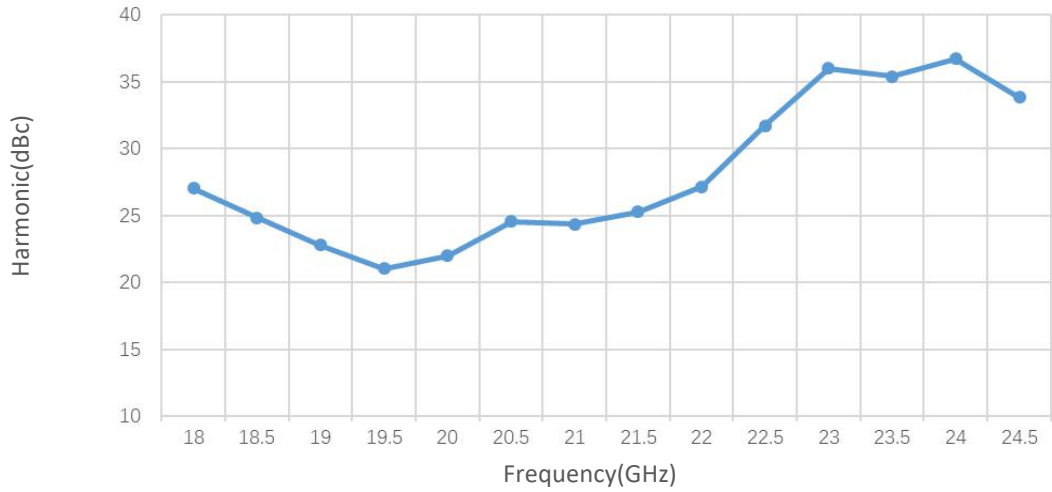
Spurious vs Frequency



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.

典型曲线 Typical Performance Data:

Harmonic 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.