

Model:TLPA12G20G-33-33
Power Amplifier
12-20GHz,Gain:33dB,Psat:33dBm
Feature:

- Ultra Wide Band: 12-20 GHz
- Gain: 33 dB Min
- Psat Output Power: 33 dBm Min
- 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 | 12-20 | | | GHz |
| 增益 Gain | 33 | | | dB |
| 线性增益控制范围/步进 Gain Adjust Range/Step | | 31.5/0.5 | | dBm |
| 饱和输出功率 Output Psat | 33 | | | dBm |
| 杂散 Supurious | | | -60 | dBc |
| 输入驻波 Input VSWR | | | 2.0 | :1 |
| 直流&交流电压 DC&AC Voltage | 220V AC&24V DC | | | V |
| 功耗 Power Consumption | 60@Max | | | W |
| 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 | SMA Female/SMA Female | |
| 直流偏置 DC Bias | Solder Pin | |
| 尺寸 Size | 250*245*100 | mm |
| 重量 Weight | ≤7.5 | Kg |

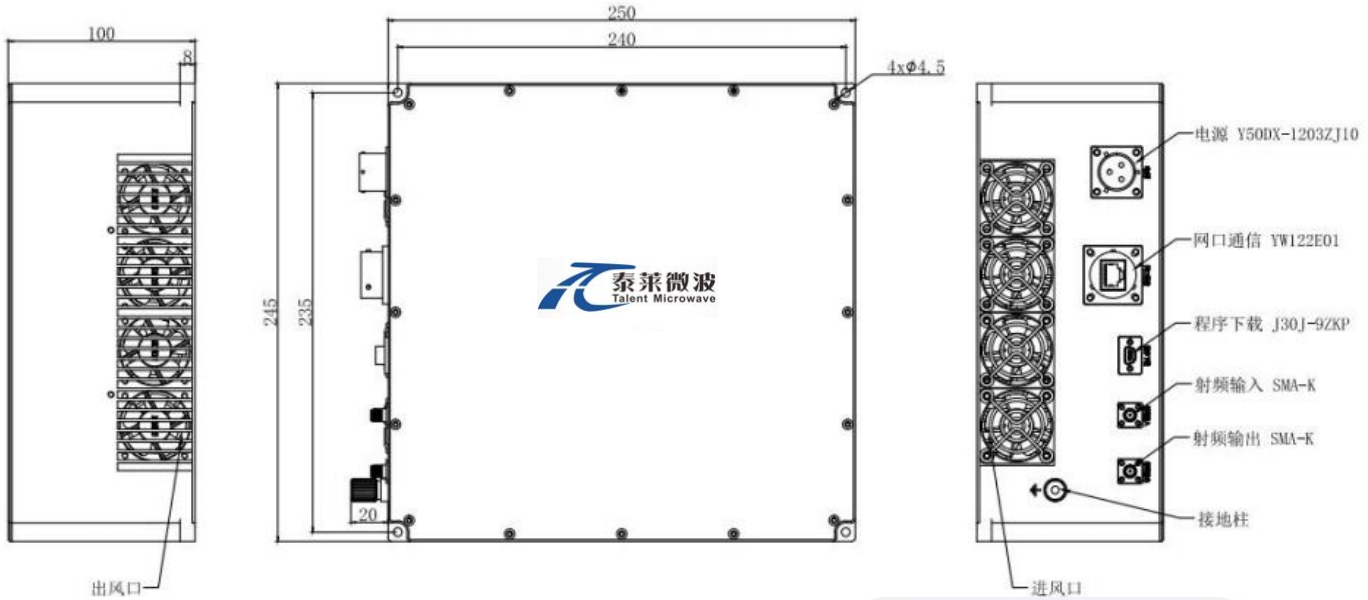
绝对最大值 Absolute Maximum Ratings:

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


**Available 220V System
 Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

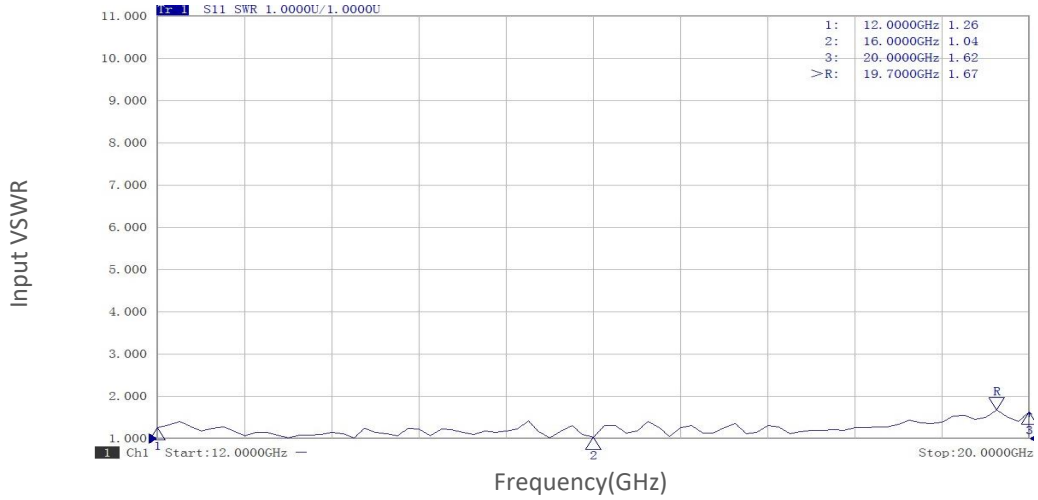
| 参数 Parameter | Min | Typ | Max | 单位 Units |
|------------------------------------|--|-----|-----|----------|
| 操作温度 Operating Temperature | -40 | | +60 | °C |
| 存储温度 Non-operating Temperature | -55 | | +85 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | 30,000 | | | feet |
| 震动 Shock / Vibration(MIL-STD-810F) | 20g,11ms,saw-tooth | | | |
| 冲击 Shock(non operating) | 20G for 11msc half sin wave,3 axis both directions | | | |

订货信息 Ordering Information:

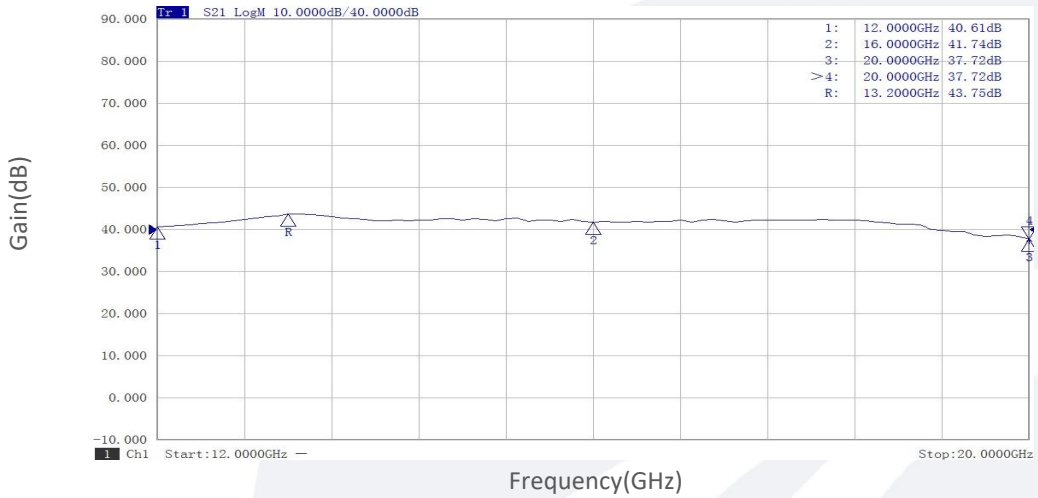
| 标准型号 Part Number | 描述 Description | 版本号 Revision |
|------------------|--|--------------|
| TLPA12G20G-33-33 | Power amplifier 12-20GHz,Gain:33dB,Psat:33dBm, +24V DC &220V AC | Rev.1.1 |

典型曲线 Typical Performance Data:

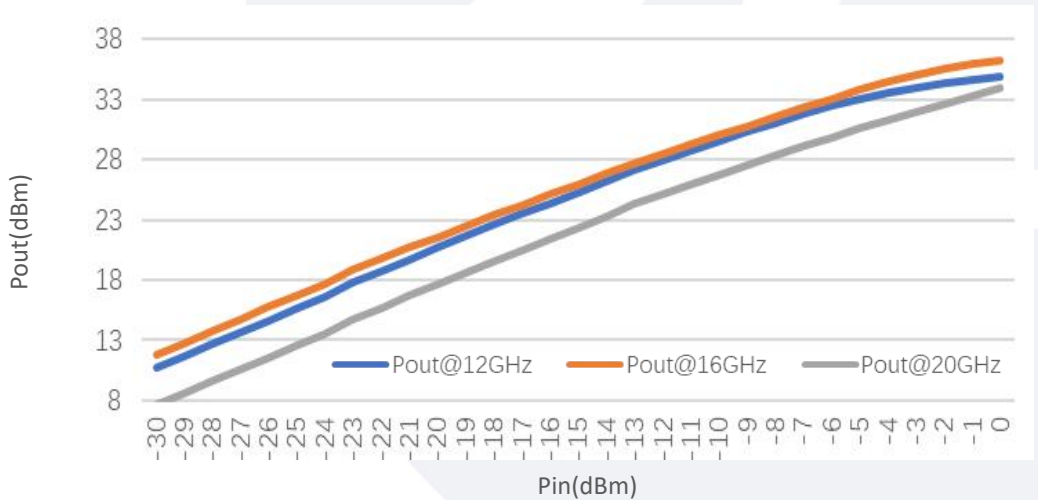
Input VSWR vs Frequency



Gain vs Frequency

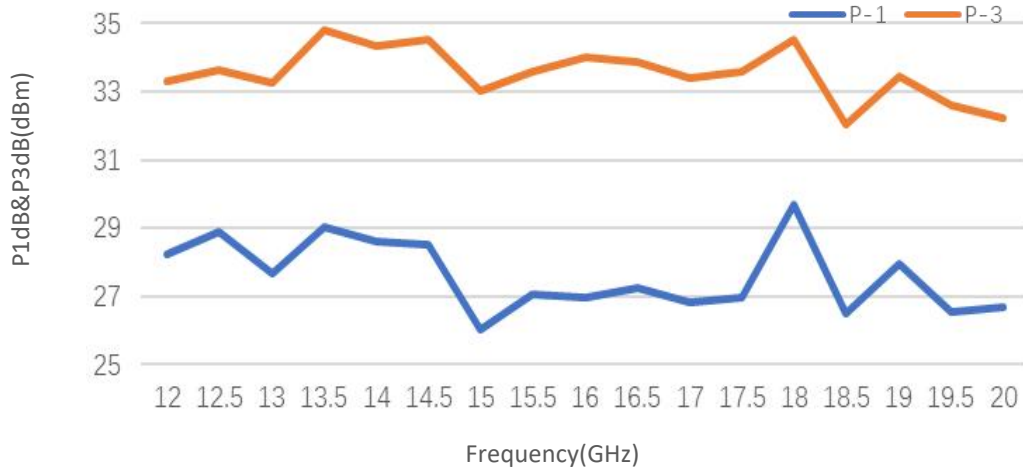


Pout@Pin

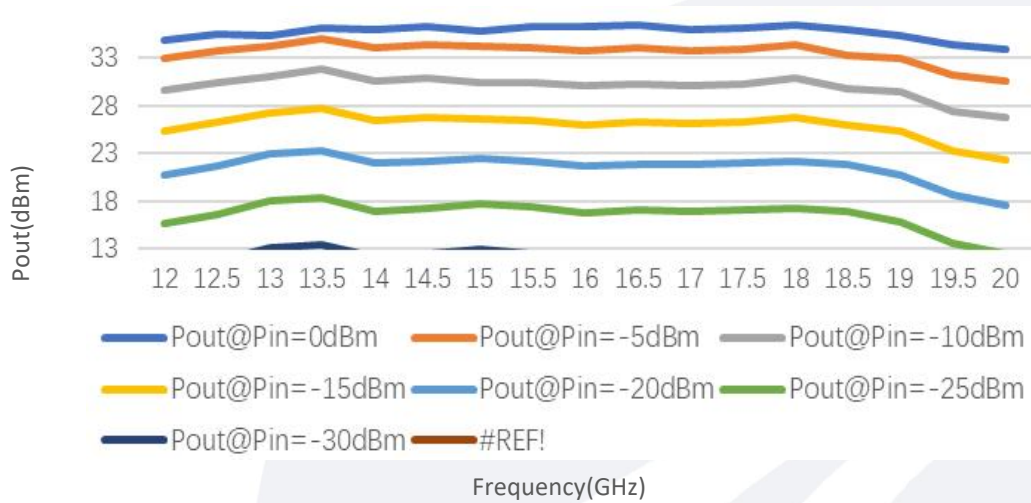


典型曲线 Typical Performance Data:

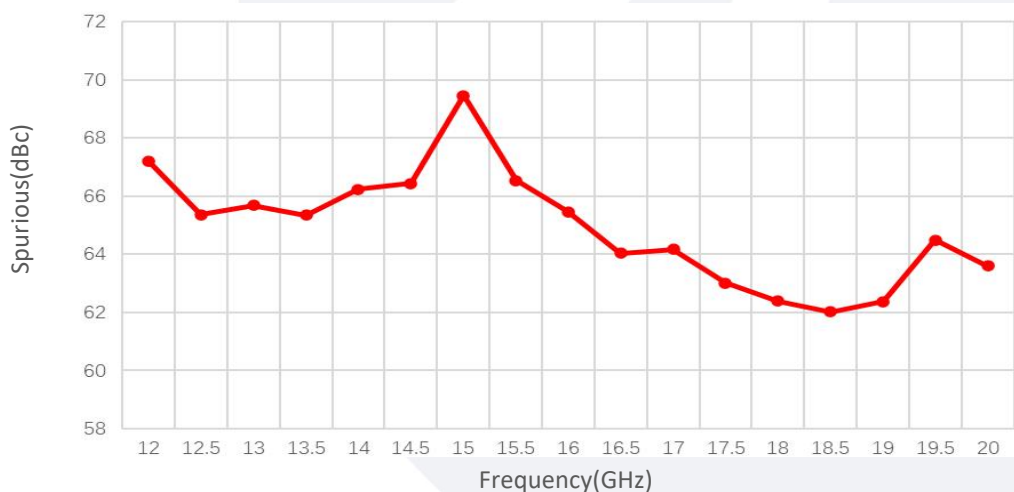
P1dB&P3dB vs Frequency



Pout@Equal_Pin



Spurious vs Frequency



典型曲线 Typical Performance Data:

Harmonic vs Frequency

