

Model:TLPA1.1G1.4G-53-53-BC
**Solid State High Power Amplifier Systems
 1.1-1.4GHz,Gain:53dB,Psat:53dBm**
Feature:

- Frequency range: 1.1-1.4GHz
- Gain: 53dB Min
- Psat Output Power: 53 dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection.
- Suitable for CW, AM, FM, Pulse
- 50 Ohm Matched Input / Output


电气特性 Electrical Specifications:

| 参数Parameter | 代码 Symbo | Min | Typ | Max | 单位Units |
|------------------------|-------------|------------|-----------|-----------|---------|
| 频率范围 Frequency range | BW | 1.1-1.4 | | | GHz |
| 增益 Gain | GP | 53 | 54 | | dB |
| 增益平坦度 Gain Flatness | Δ GL | | ± 1.0 | ± 2.0 | dB |
| 线性输出功率 Output P1dB | P1dB | | 50 | | dBm |
| 饱和输出功率 Output P1dB | Psat | 53 | | | dBm |
| 杂散 Spurious | Spur | | | -60 | dBc |
| 谐波 Harmonics | HAM | | | -10 | dBc |
| 输入驻波 Input VSWR | VSWRin | | 1.5 | 2.0 | :1 |
| 交流电压 AC Voltage | Vac | 110 | 220 | | V AC |
| 直流电流 DC Supply Current | Iac | 5A@220V AC | | | A |
| 阻抗 Impedance | I/O-IMP | 50 | | | Ohms |

机械特性 Mechanical Specifications:

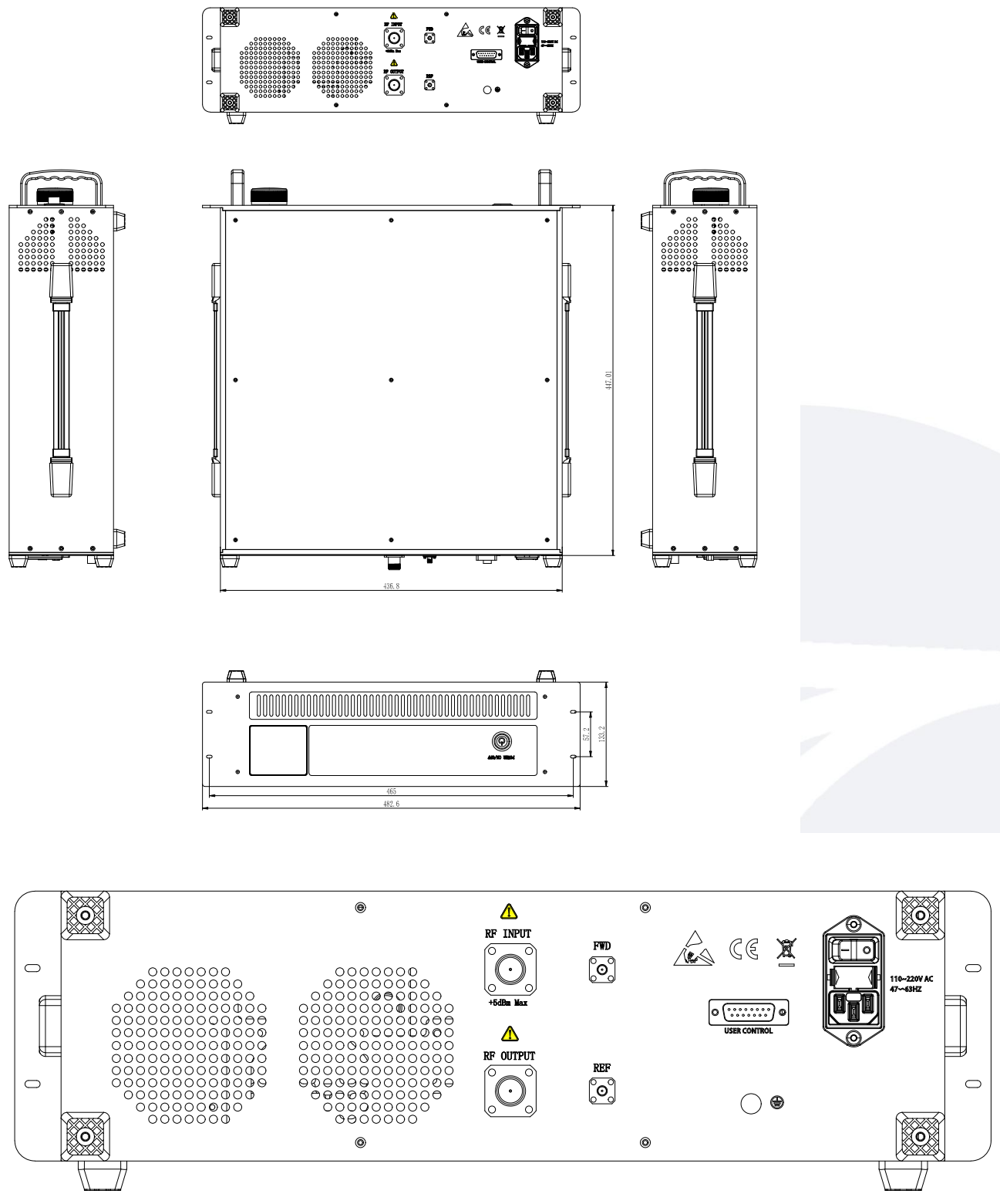
| 参数 Parameter | 指标 Value | 单位Units |
|----------------------------------|------------------------|---------|
| 输入/输出接口 Input /Output Connector | N Female/N Female | |
| 正向/反向耦合 Forward/Reverse Coupling | SMA Female/ SMA Female | -40dB |
| 尺寸 Size | 3U*500 | mm |
| 重量 Weight | ≤ 17 | Kg |

绝对最大值 Absolute Maximum Ratings:

| 参数Parameter | 指标 Value |
|------------------------------|----------------------|
| 输入功率 RF Input Power | 5 dBm |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

外形尺寸 Outline Drawing:

Unit: mm



主要功能 Key Features:

| 参数 Parameter | 特点 Advantages |
|-----------------------------|--|
| 控制功能 Control functions | 1, Power setting On/Off |
| 内置保护功能 Protection functions | 1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR |
| 冷却系统 Cooling system | Built in Cooling system,forced air cooling |

温度环境 Environmental Conditions:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|-------------------------------------|---|-----|-----|----------|
| 操作温度 Operating Temperature* | -20 | | +40 | °C |
| 存储温度 Non-operating Temperature* | -30 | | +50 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | 10000 | | | 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 | | | |

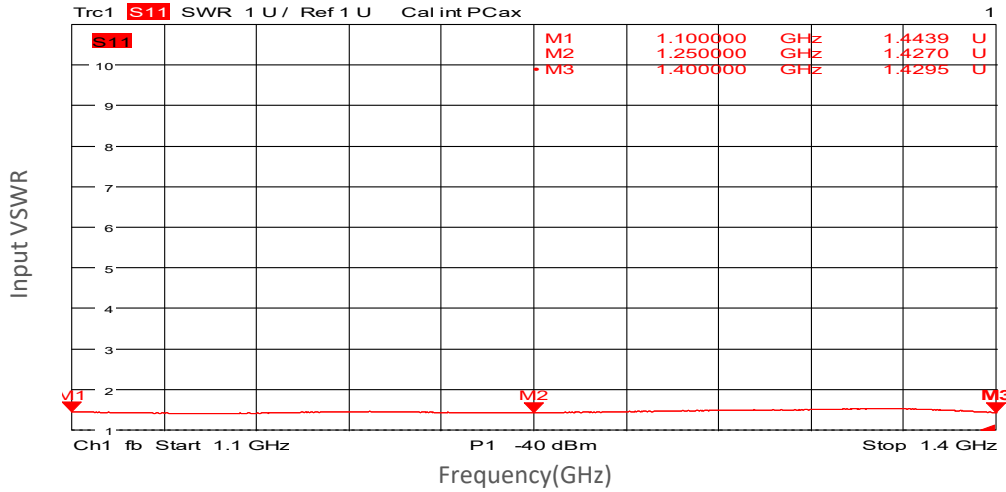
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

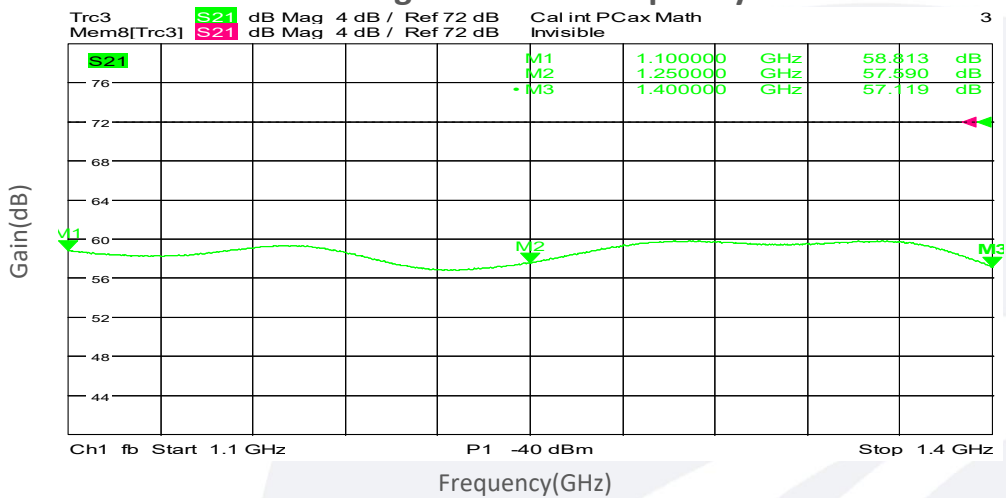
| 标准型号 Part Number | 描述 Description | 版本号Revision |
|-----------------------|---|-------------|
| TLPA1.1G1.4G-53-53-BC | Solid State High Power Amplifier Systems 1.1-1.4GHz,Gain:53dB,Psat:53dBm,220V AC,Built in Fan Cooling | Rev.2.1 |

典型曲线 Typical Performance Data:

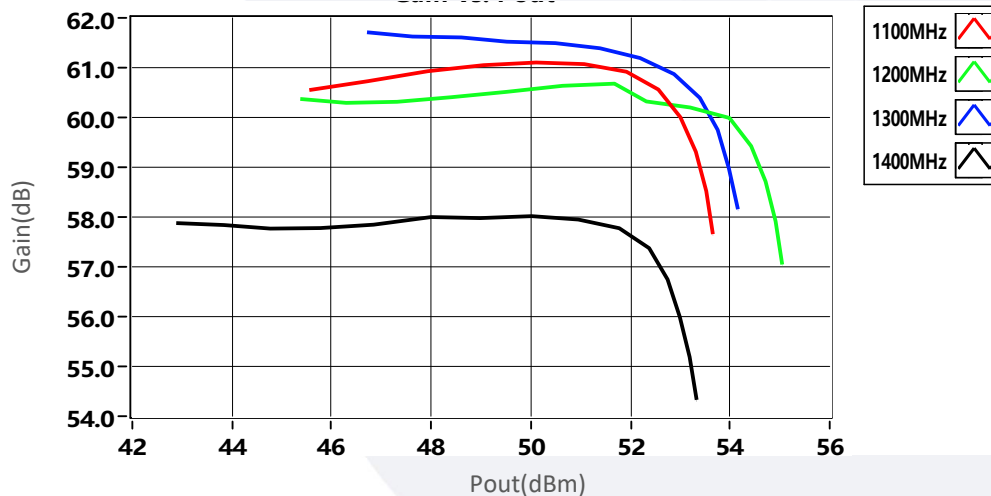
Input VSWR vs Frequency



Small Signal Gain vs Frequency



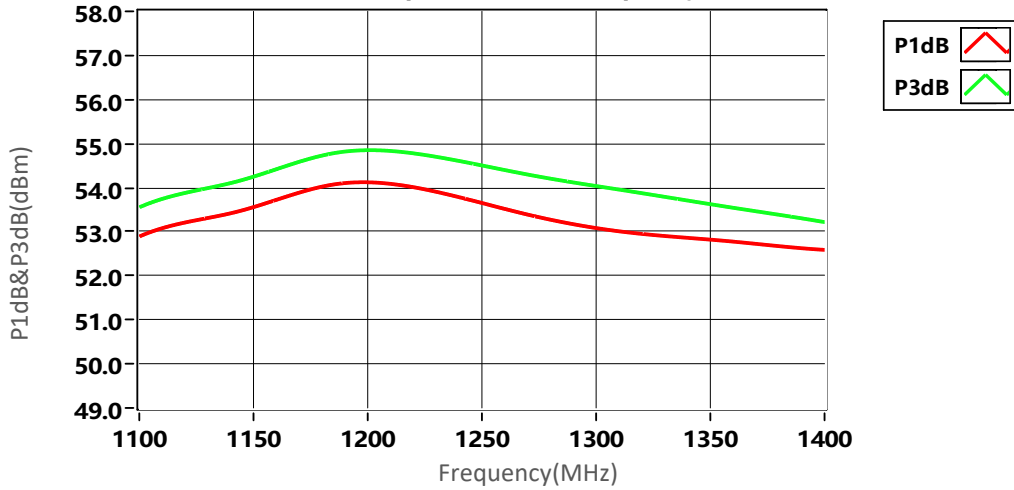
Gain vs Output Power



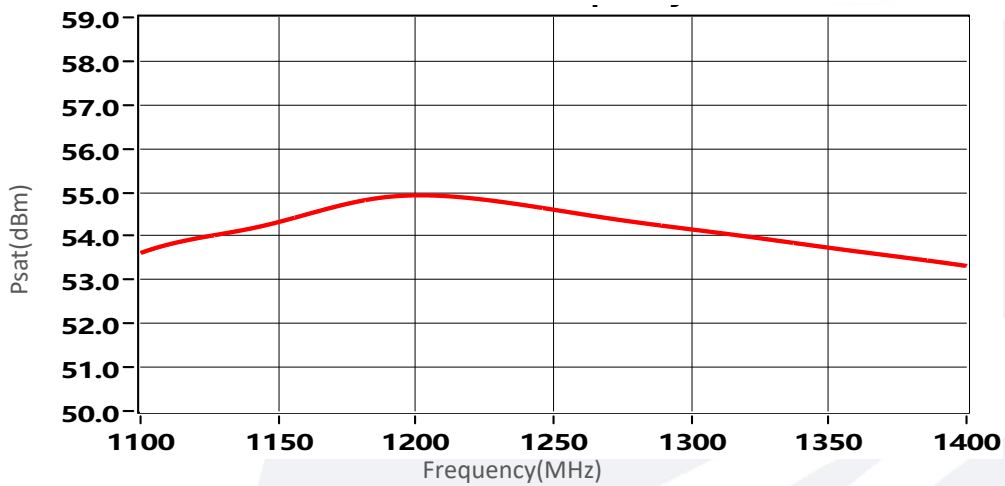
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

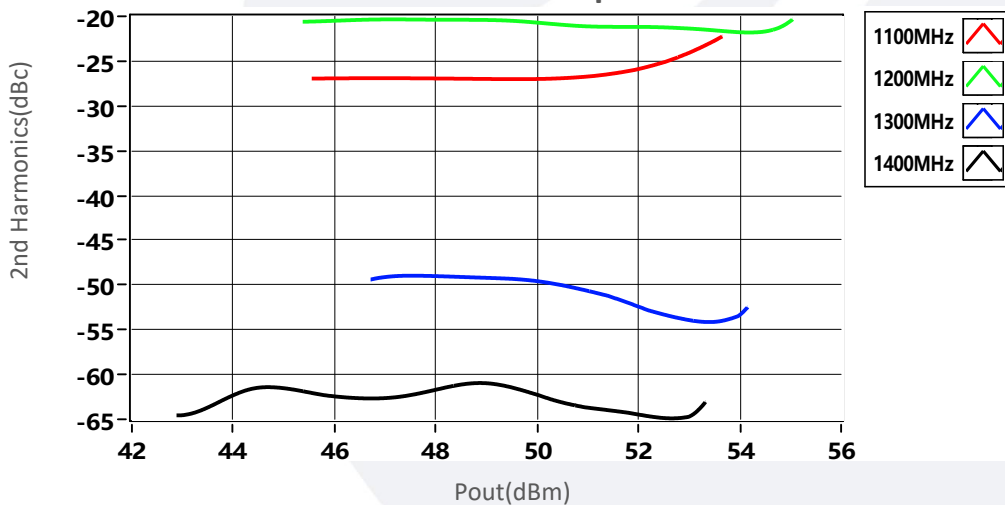
P1dB&P3dB vs Frequency



Psat vs Frequency



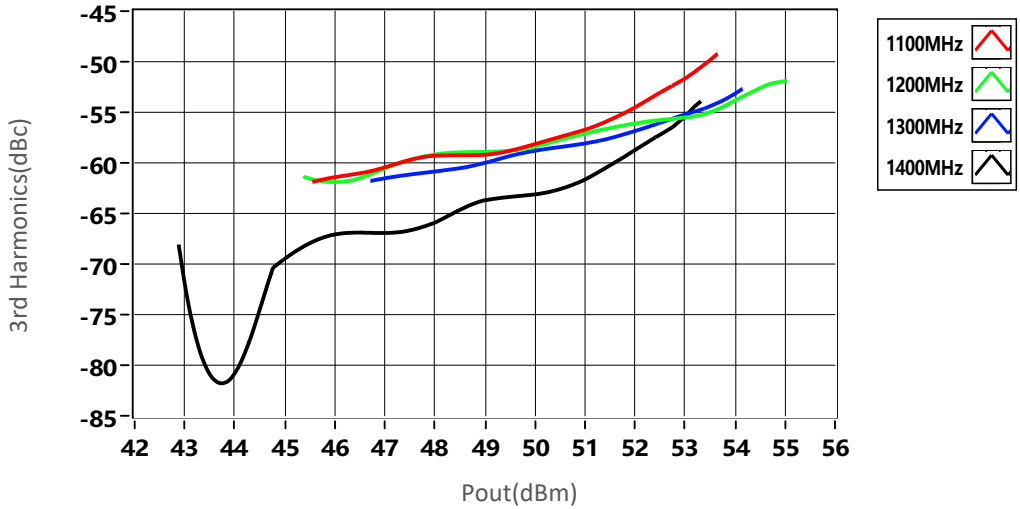
2nd Harmonics vs Output Power



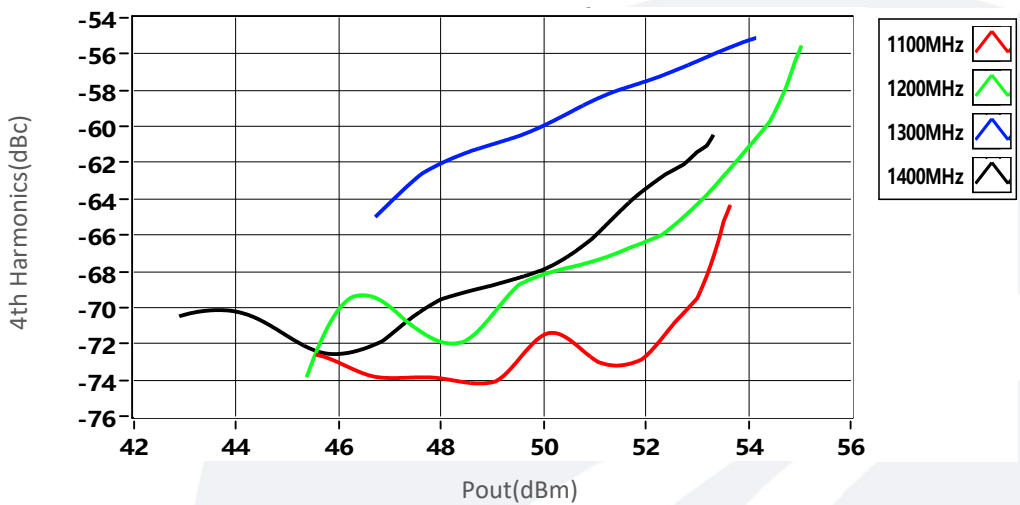
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

3rd Harmonics vs Output Power



4th Harmonics vs Output Power



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