泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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# Power Amplifier

## 6-18GHz /60dB Gain/53 dBm Psat  Model: TLPA6G18G-60-53

TLPA6G18G-60-53 is a power amplifier with a typical power gain of 60 dB and a Psat of 53 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/3500 W. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with WRD500.

### Features:

- Ultra Wide Band: 6-18GHz
- Gain: 60dB Min
- Output Power Psat: 53dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### 电气特性 Electrical Characteristics:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|---|---|---|---|---|
| 频率范围 Frequency range | | 6-18 | | GHz |
| 功率增益 Power Gain | 60 | | | dB |
| 增益平坦度 Gain Flatness | | ±4.5 | ±5.0 | dB |
| 饱和输出功率 Output Psat | 53 | | | dBm |
| 杂散 Spurious@Pout=50dBm | | | -55 | dBc |
| 二次谐波 2nd Harmonic@Pout=50dBm | | -20 | -15 | dBc |
| 直流电压 DC Voltage | | 28 | | V DC |
| 功耗 Power Consumption | | | 3500 | W |
| 阻抗 Impedance | | 50 | | Ohms |

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## 机械特性 Mechanical Specifications:

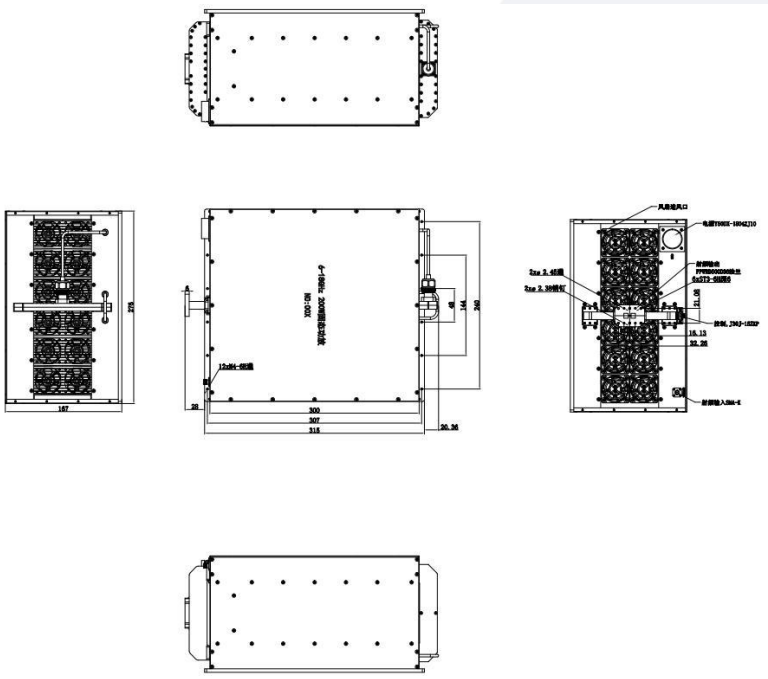
| 参数 Parameter | 指标 Value | 单位 Units |
|---|---|---|
| 输入/输出接口 Input /Output Connector | SMA Female/WRD500 | |
| DC 加电接口 DC Power Interface | Y50DX-1804 | |
| 尺寸 Size | 270*276*207.25 | mm |
| 重量 Weight | 25 | Kg |

## 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 | 5 dBm |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 外形图 Outline Drawing:

Unit:mm



| Y50DX-1904 Define | |
|---|---|
| 引脚 Pin | 功能 Function |
| Pin1-2 | +28V |
| Pin3-4 | GND |

***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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## 温度环境 Environmental Conditions:

| 参数 Parameter | Min | Typ | Max | 单位 Units |
|---|---|---|---|---|
| 操作温度 Operating Temperature* | -20 | | +40 | ℃ |
| 存储温度 Non-operating Temperature* | -45 | | +65 | ℃ |
| 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 Desciption | 版本号 Revision |
|---|---|---|
| TLPA6G18G-60-53 | Power amplifier 6-18GHz,Gain:60dB,Psat:53dBm,+28V DC,Built in Fan Cooling . | Rev.1.1 |

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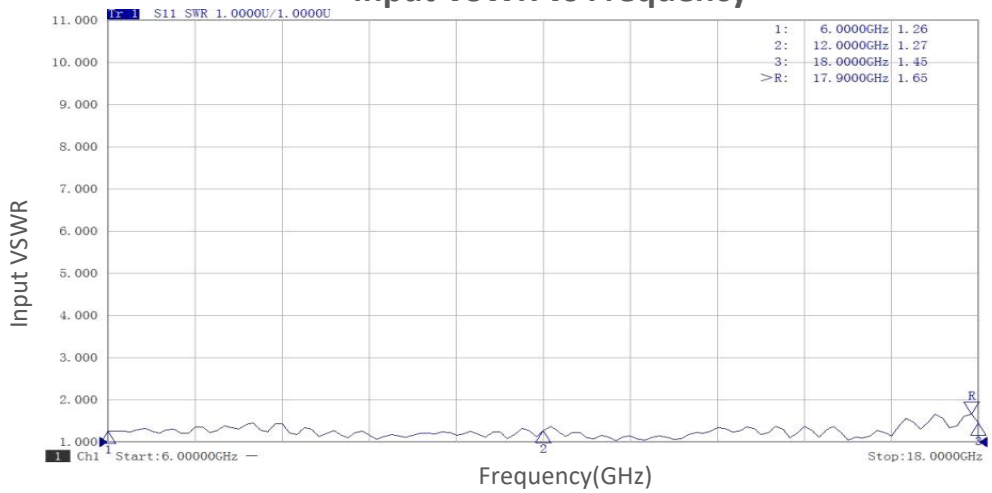
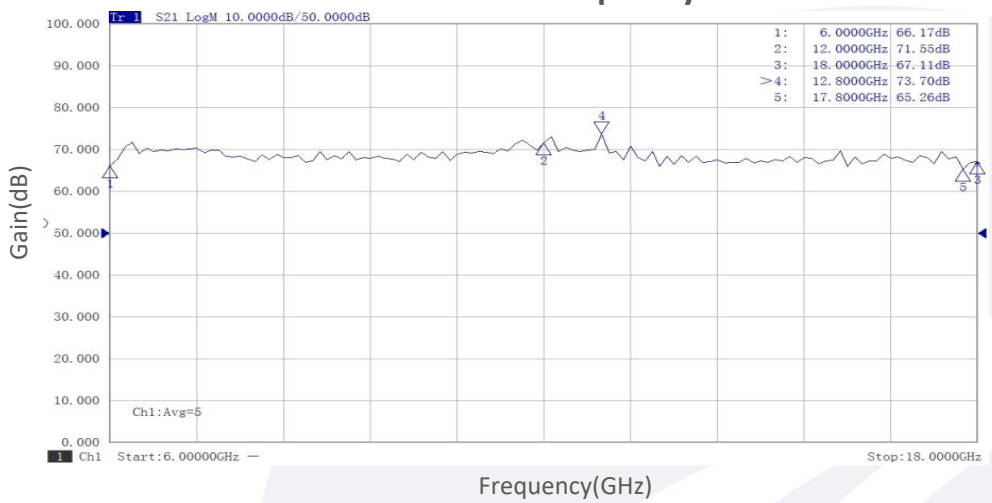
## 典型曲线 Typical Performance Data:

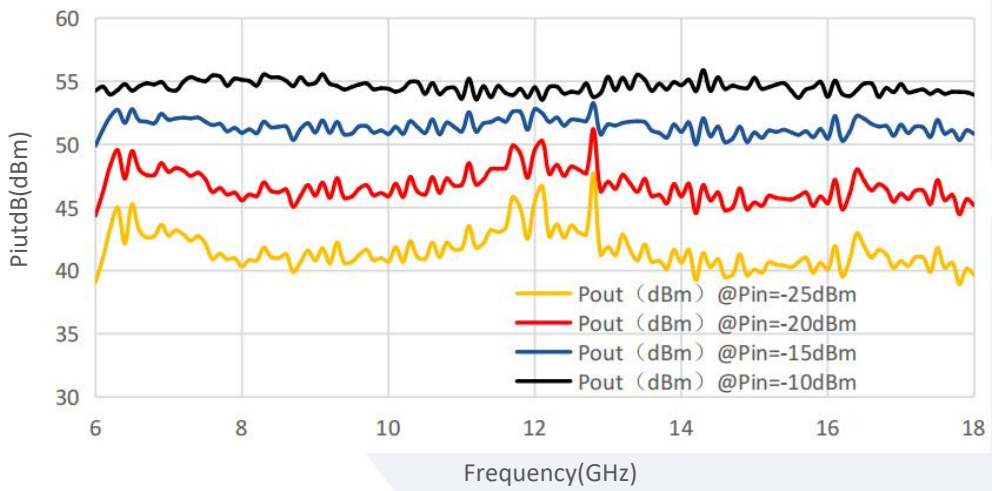
### Input VSWR vs Frequency




### Gain vs Frequency




### Pout 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.

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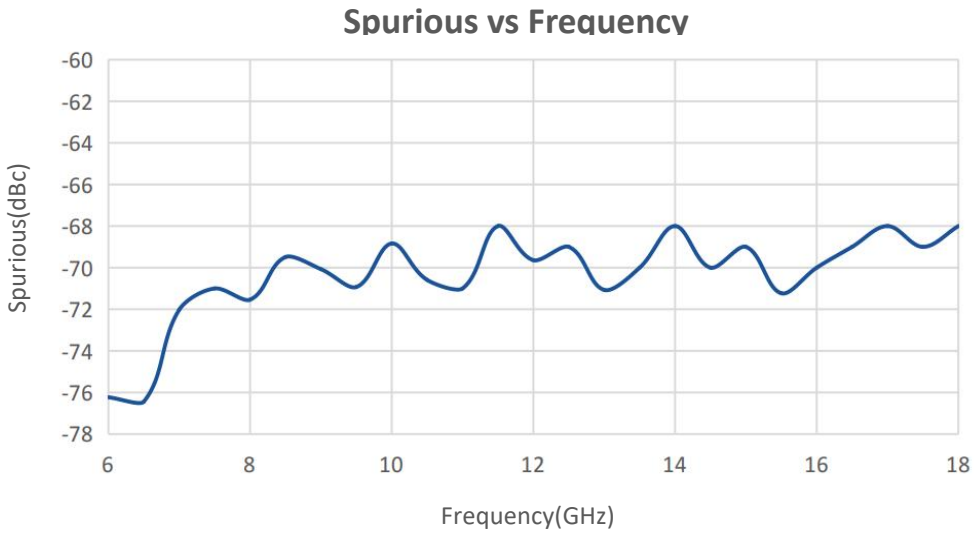


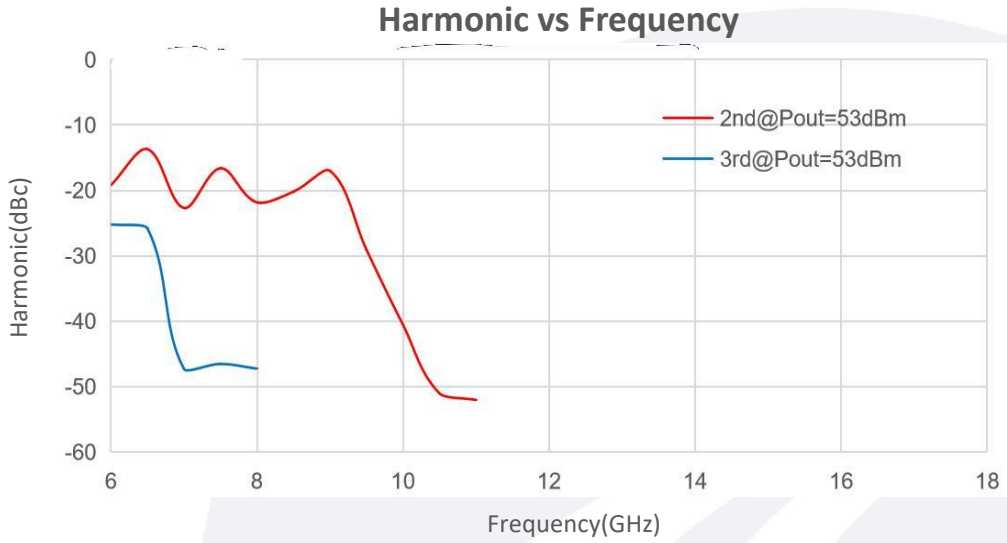


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