

Model:TLPA0.38G6G-30-37

Power Amplifier  
0.38-6GHz, Gain:35dB, Psat:37dBm

Feature:

- Ultra Wide Band: 0.38-6 GHz
- Gain: 35 dB Min
- Psat Output Power: 37 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   | 0.38-6 |      |      | GHz      |
| 增益 Gain                | 35     |      |      | dB       |
| 增益平坦度 Gain Flatness    |        | ±2.5 | ±4.0 | dB       |
| 线性输出功率 Output P1dB     |        | 35   |      | dBm      |
| 饱和输出功率 Output Psat     | 37     |      |      | dBm      |
| 杂散 Supurious           |        | -60  |      | dBc      |
| 谐波抑制 Harmonic          |        | -15  |      | dBc      |
| 输入驻波 Input VSWR        |        | 1.5  | 2.5  | :1       |
| 直流电压 DC Voltage        | +30    |      |      | V DC     |
| 直流电流 DC Supply Current | 2      |      |      | 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 | SMA Female/SMA Female |          |
| 直流偏置 DC Bias                   | Solder Pin            |          |
| 尺寸 Size                        | 100*70*15             | mm       |
| 重量 Weight                      | /                     | g        |

绝对最大值 Absolute Maximum Ratings:

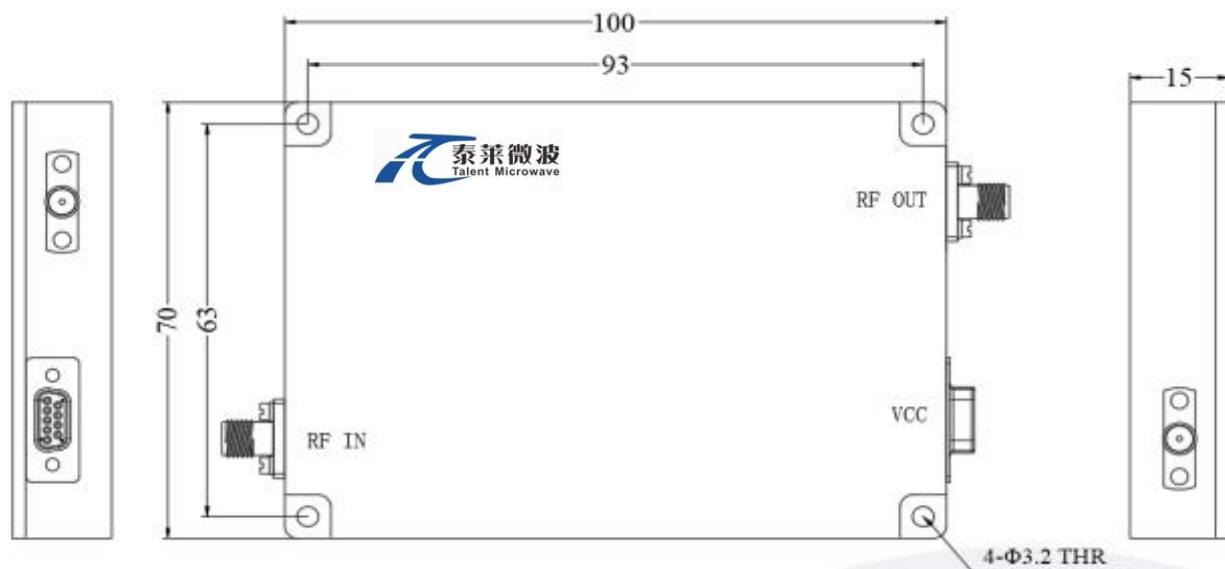
| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | +32 V                |
| 输入功率 RF Input Power          | +8 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |



Available 220V System  
Benchtop Amplifier

## 外形尺寸 Outline Drawing:

Unit: mm



## \*\*\*Heat Sink Required During Operation



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

## 温度环境 Environmental Conditions:

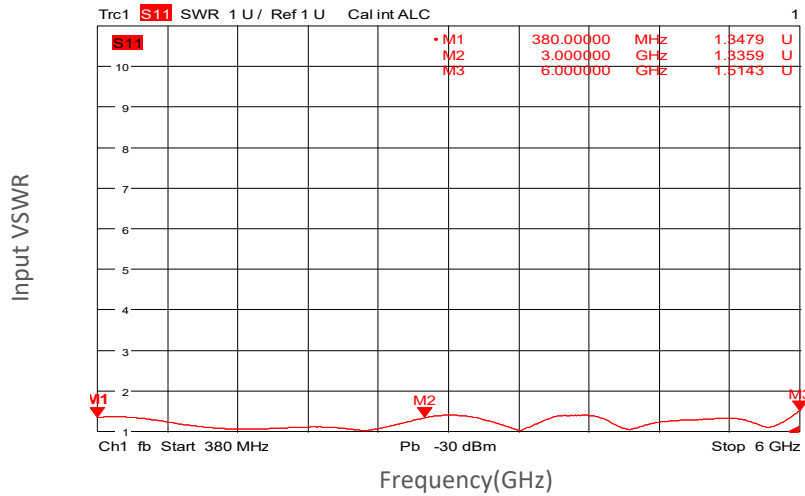
| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature         | -30                                                 |     | +70 | °C       |
| 存储温度 Non-operating Temperature     | -45                                                 |     | +85 | °C       |
| 相对湿度 Relative humidity             | 100%RH at 35°C, 95%RH at 40°C                       |     |     | %        |
| 海拔 Altitude                        | 50,000                                              |     |     | 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:

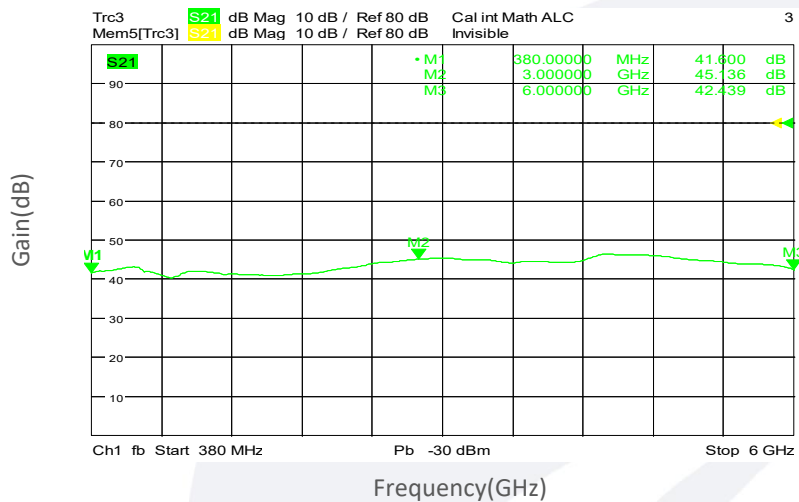
| 标准型号 Part Number     | 描述 Description                                                              | 版本号 Revision |
|----------------------|-----------------------------------------------------------------------------|--------------|
| TLPA0.38G6G-30-37    | Power amplifier 0.38-6GHz, Gain:35dB, Psat:37dBm, +30V DC, Without Heatsink | Rev.1.1      |
| TLPA0.38G6G-30-37-HS | Power amplifier 0.38-6GHz, Gain:35dB, Psat:37dBm, +30V DC, With Heatsink    | Rev.1.1      |

典型曲线 Typical Performance Data:

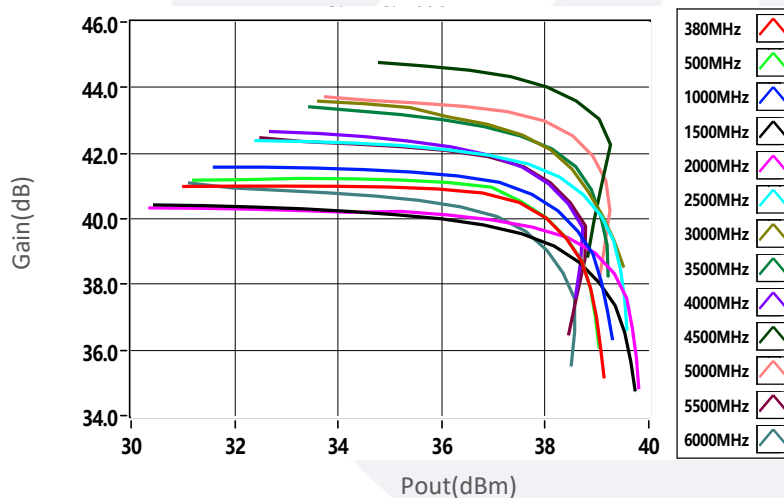
### Input VSWR vs Frequency



### Gain vs Frequency

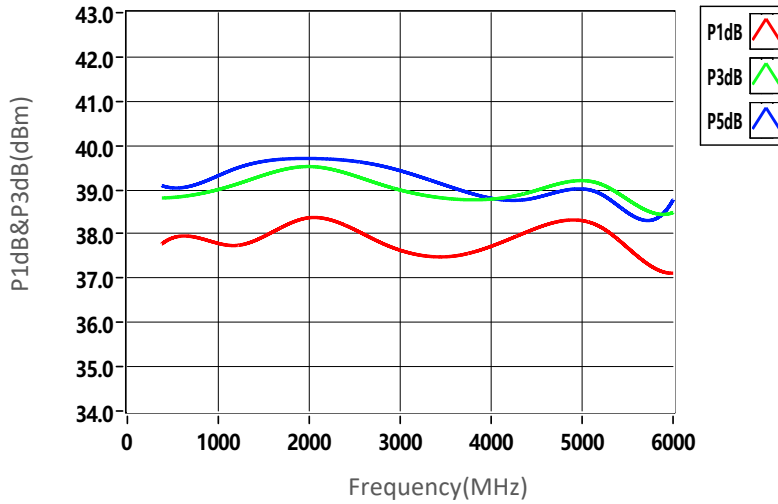


### Gain vs Output Power

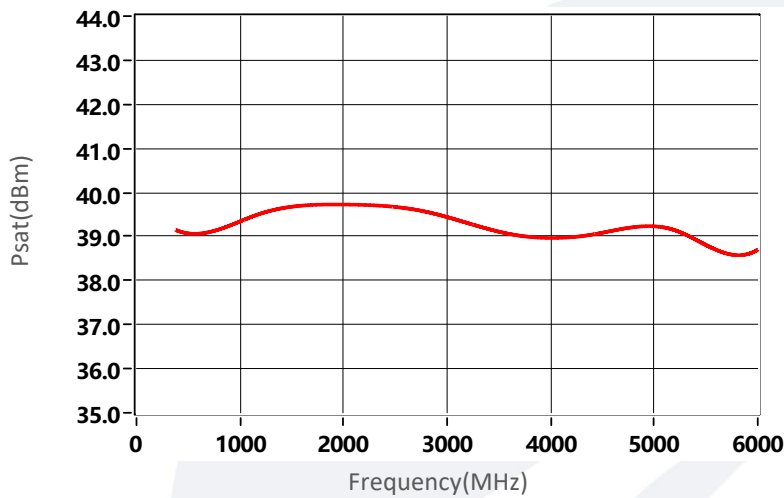


典型曲线 Typical Performance Data:

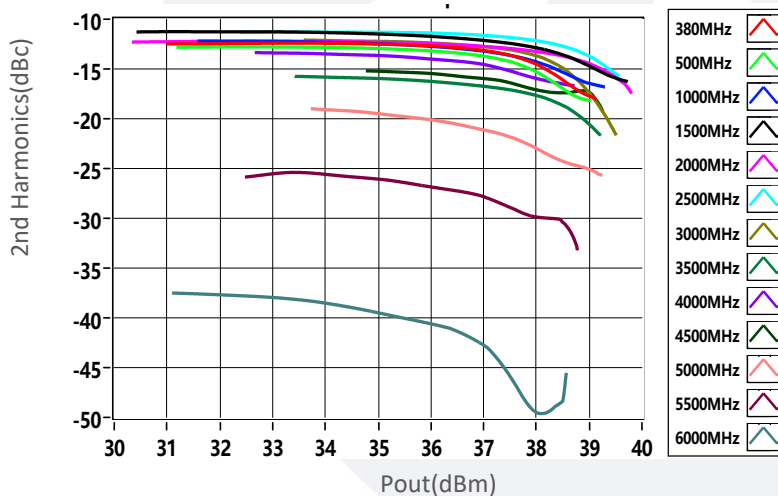
**P1dB&P3dB vs Frequency**



**Psat vs Frequency**



**2nd Harmonics vs Output Power**



典型曲线 Typical Performance Data:

