

**Model:TLPA100M6G-30-30**
**Power Amplifier**  
**0.1-6GHz,Gain:30dB,P1dB:30dBm**
**Feature:**

- Ultra Wide Band: 0.1-6GHz
- Gain:27dB Min
- Psat Output Power: 30dBm 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	0.1-6			GHz
增益 Gain	27	30		dB
增益平坦度 Gain Flatness		±3	±4	dB
线性输出功率 Output P1dB	30	31		dBm
谐波 Harmonics		-25	-20	dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		+15	+16	V DC
直流电流 DC Supply Current		700	1000	mA
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	120*70*15	mm
重量 Weight	200	g

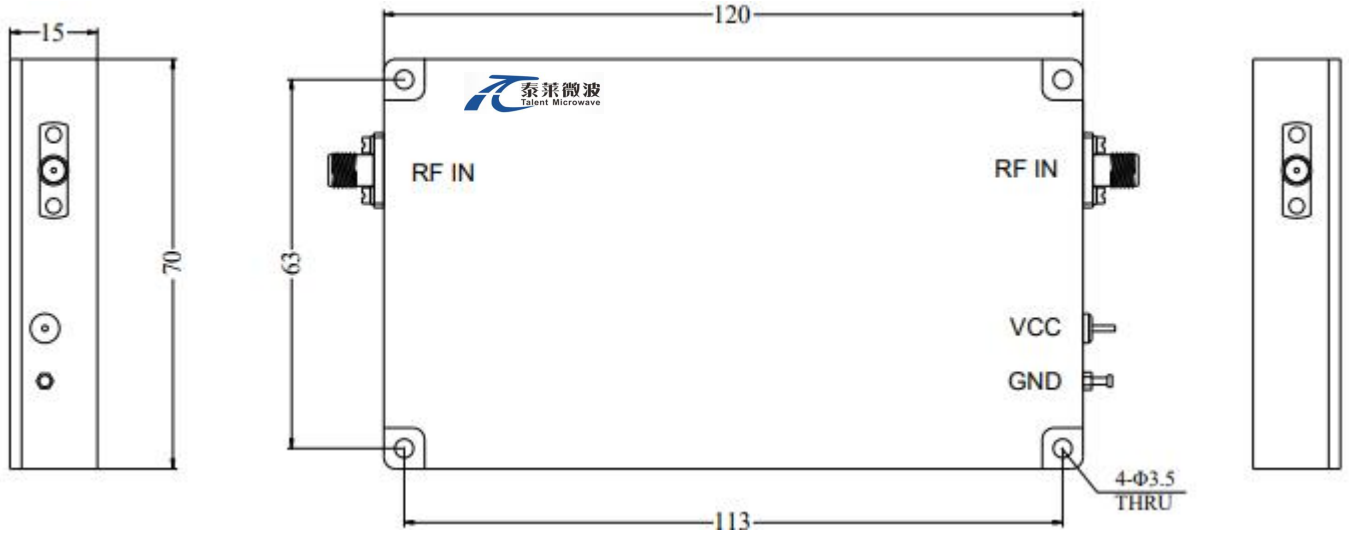
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+16V
输入功率RF Input Power	5dBm
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**



温度环境 Environmental Conditions:

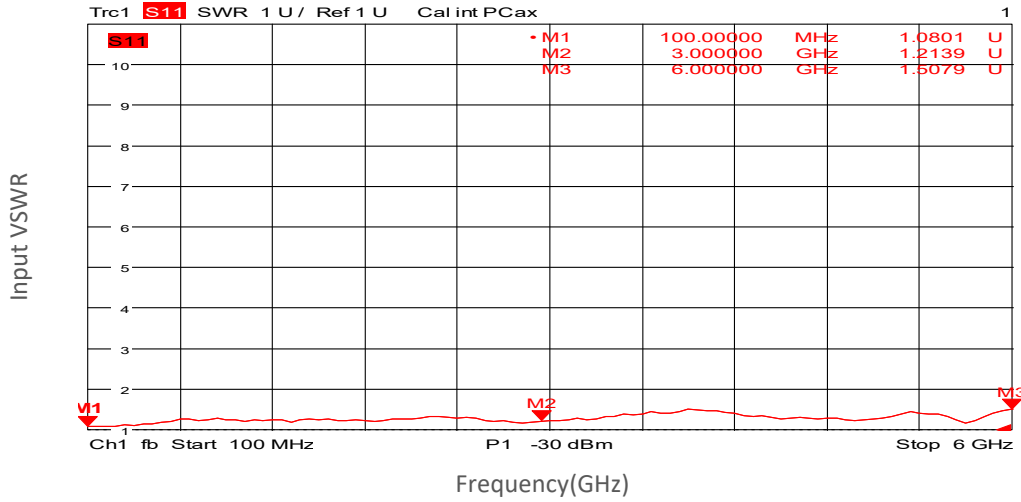
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

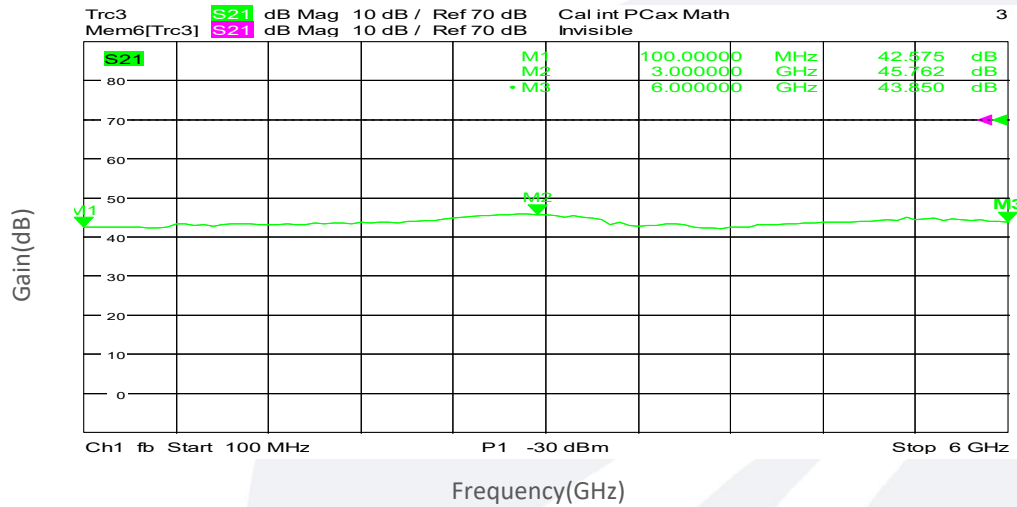
标准型号 Part Number	描述 Description	版本号Revision
TLPA100M6G-30-30	Power amplifier 0.1-6.0GHz,Gain:30dB,P1dB:30dBm,+15V DC,Without Heatsink.	Rev.1.1
TLPA100M6G-30-30 -HS	Power amplifier 0.1-6.0GHz,Gain:30dB,P1dB:30dBm,+15V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

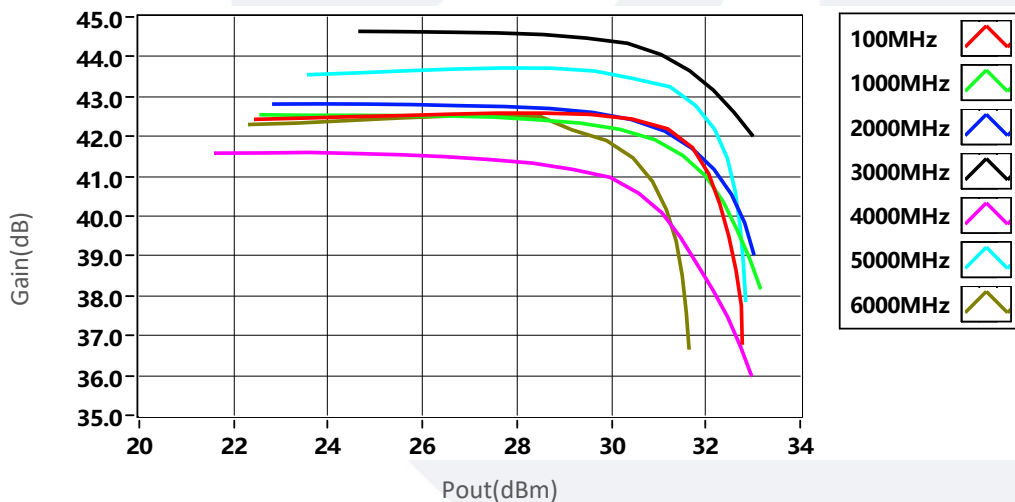
### Input VSWR vs Frequency



### Gain vs Frequency

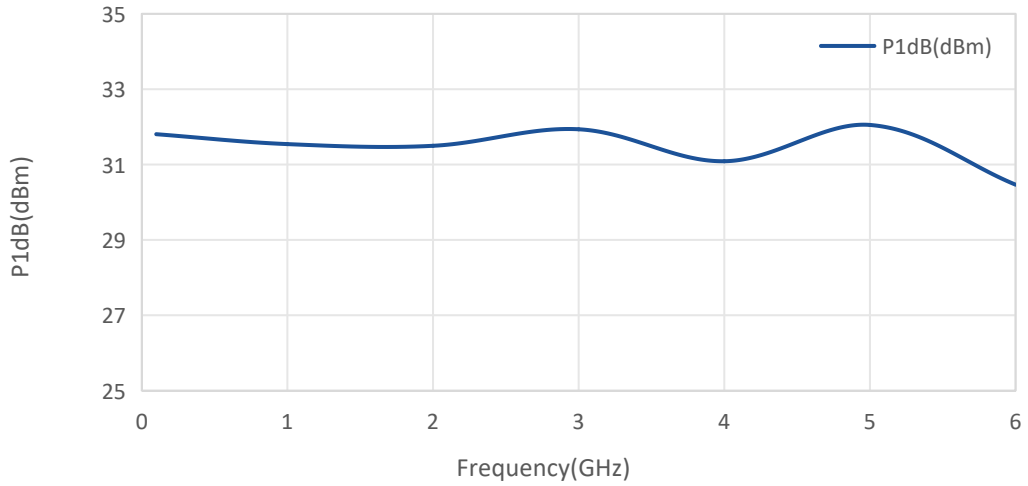


### Gain vs Output Power

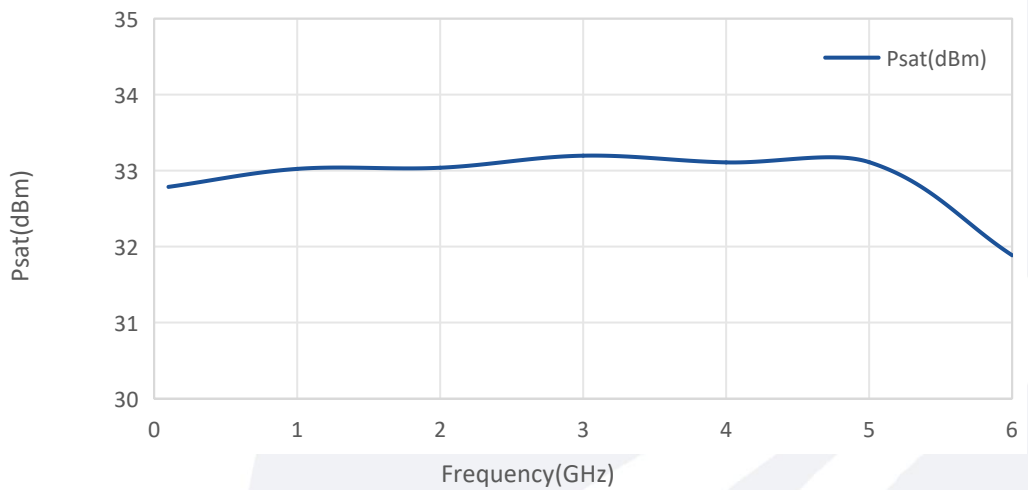


典型曲线 Typical Performance Data:

**P1dB vs Frequency**



**Psat vs Frequency**



**Harmonics vs Frequency**

