

**Model:TLPA1G18G-30-30**
**Power Amplifier**  
**1-18GHz,Gain:30dB,P1dB:30dBm**
**Feature:**

- Ultra Wide Band:1-18GHz
- Gain:30dB Min
- P1dB 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	1-18			GHz
增益 Gain	30			dB
增益平坦度 Gain Flatness		±2	±2.5	dB
线性输出功率 Output P1dB	30			dBm
饱和输出功率 Output Psat		31		dBm
噪声系数 Noise Figure			5	dB
杂散 Spurious		-60		dBc
输入驻波 Input VSWR		2	2.2	:1
输出驻波 Output VSWR		2	2.2	:1
直流电压 DC Voltage		18	20	V DC
直流电流 DC Supply Current		1		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	58.5*38*12	mm
重量 Weight	50	g

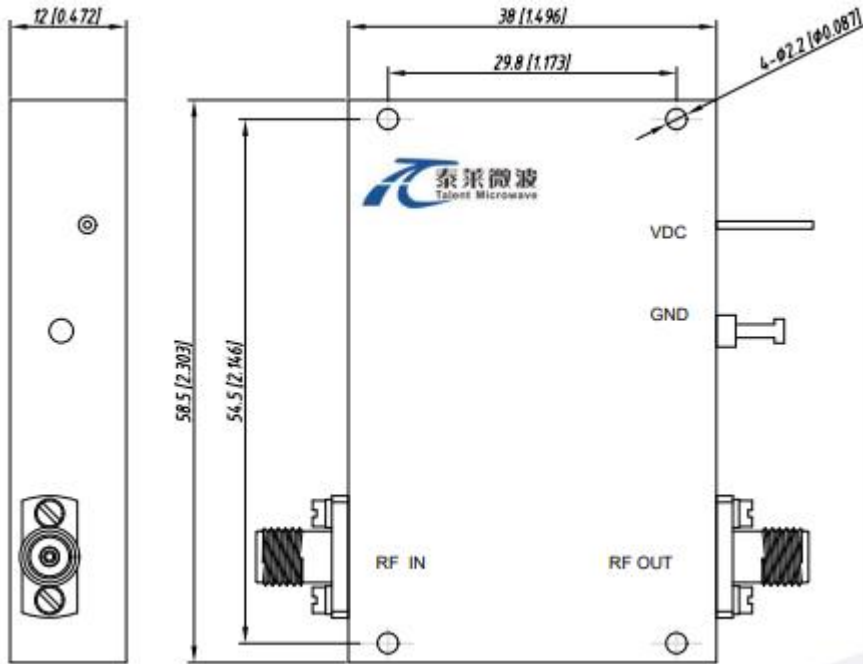
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
输入功率 RF Input Power	+6 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:

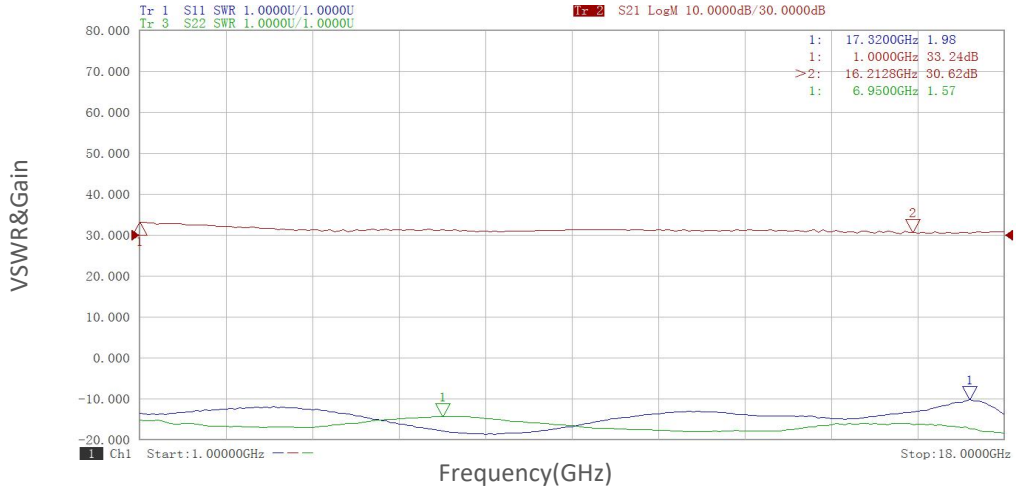
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

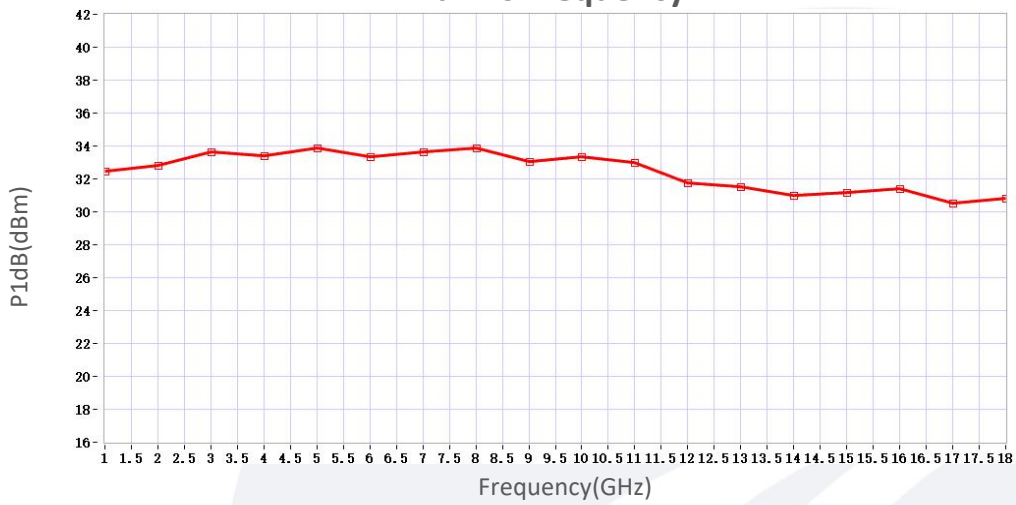
标准型号 Part Number	描述 Description	版本号 Revision
TLPA1G18G-30-30	Power amplifier 1-18GHz, Gain:30dB, P1dB:30dBm, +24V DC, Without Heatsink.	Rev.1.2
TLPA1G18G-30-30-HS	Power amplifier 1-18GHz, Gain:30dB, P1dB:30dBm, +24V DC, With Heatsink.	Rev.1.2

典型曲线 Typical Performance Data:

**VSWR&Gain vs Frequency**



**P1dB 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.