

**Model:TLPA1G18G-43-32**
**Power Amplifier**  
**1-18GHz,Gain:43dB,Psat:32dBm**
**Feature:**

- Ultra Wide Band:1-18GHz
- Gain:43dB Typ
- Psat Output Power:32dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

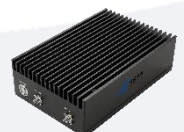
参数Parameter	Min	Typ	Max	单位Units
频率范围 Frequency range		1-18		GHz
增益 Gain	42	43		dB
增益平坦度 Gain Flatness		±2	±2.5	dB
线性输出功率 Output P1dB	30	31		dBm
饱和输出功率 Output Psat		32		dBm
杂散 Spurious		-60		dBc
输入驻波 Input VSWR		2	2.2	:1
输出驻波 Output VSWR		2	2.2	:1
直流电压 DC Voltage		+18		V DC
直流电流 DC Supply Current		700		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	58.5*38*12.5	mm
重量 Weight	/	g

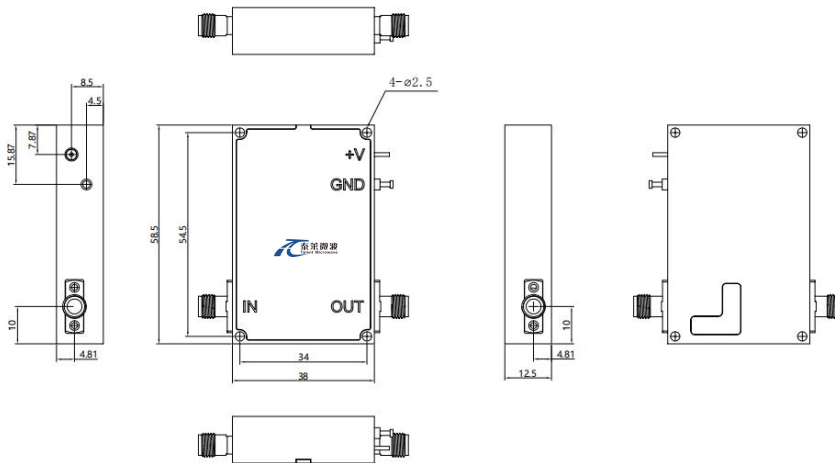
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	15 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**



温度环境 Environmental Conditions:

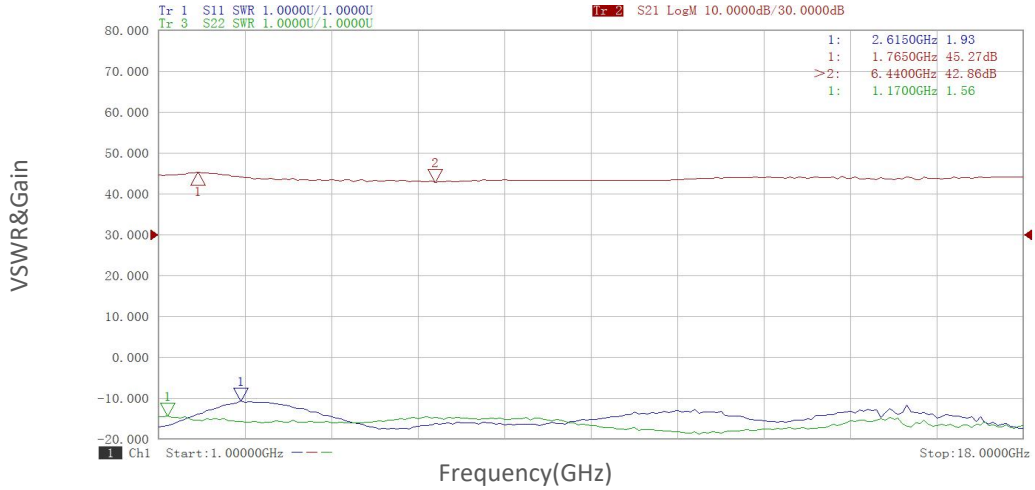
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

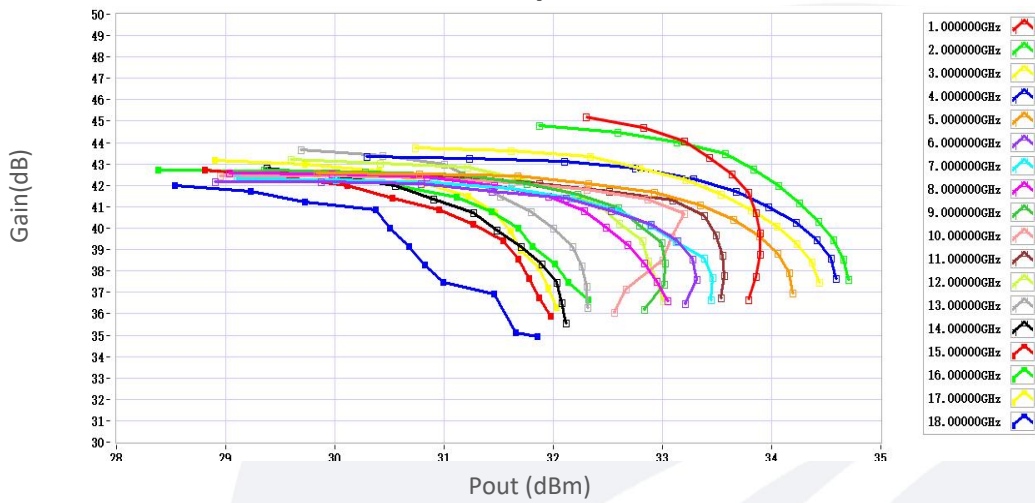
标准型号 Part Number	描述 Description	版本号Revision
TLPA1G18G-43-32-HS	Power amplifier 1-18GHz,Gain:43dB,Psat:32dBm,+18V DC,With Heatsink.	Rev.1.2

典型曲线 Typical Performance Data:

**VSWR&Gain vs Frequency**



**Gain vs Output Power**



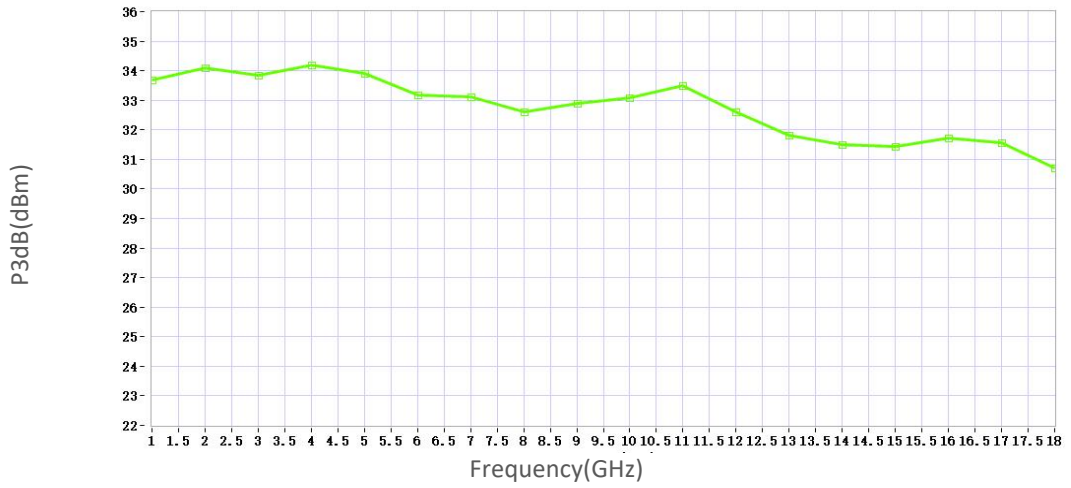
**P1dB vs Frequency**



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.

典型曲线 Typical Performance Data:

**P3dB vs Frequency**



**Psat 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.