

**Model: TLPA12.5G18G-47-40**
**Power Amplifier**  
**12.5-18GHz, Gain: 47dB, Psat: 40dBm**
**Feature:**

- Ultra Wide Band: 12.5-18GHz
- Gain: 47dB Min
- Psat Output Power: 40dBm 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	12.5-18			GHz
增益 Gain	47			dB
增益平坦度 Gain Flatness		±2		dB
线性输出功率 Output P1dB		37		dBm
饱和输出功率 Output Psat	40			dBm
输入驻波 Input VSWR		2		:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		5		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	/	mm
重量 Weight	1	Kg

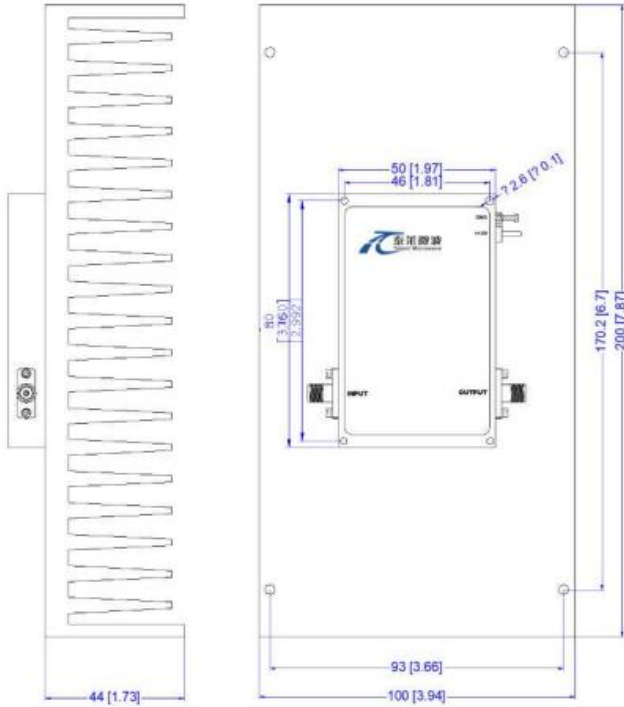
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28V
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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

温度环境 Environmental Conditions:

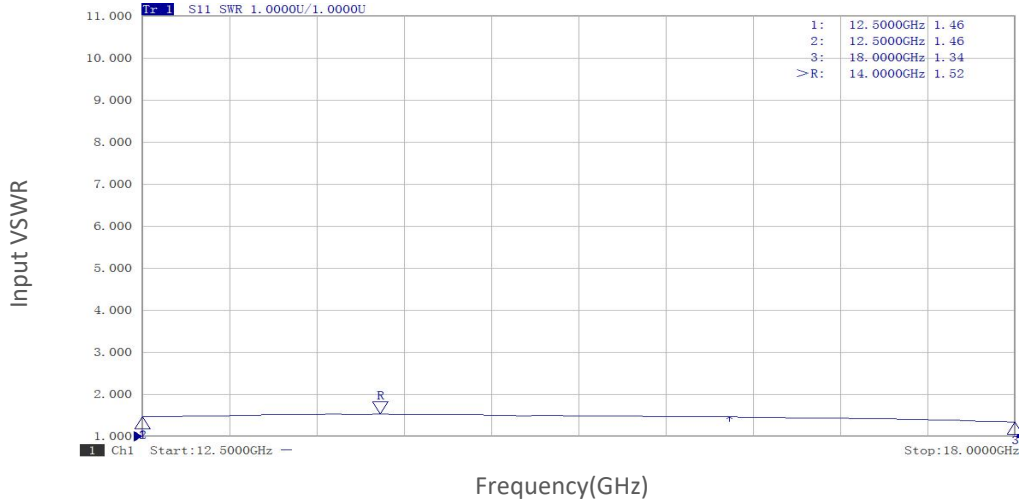
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

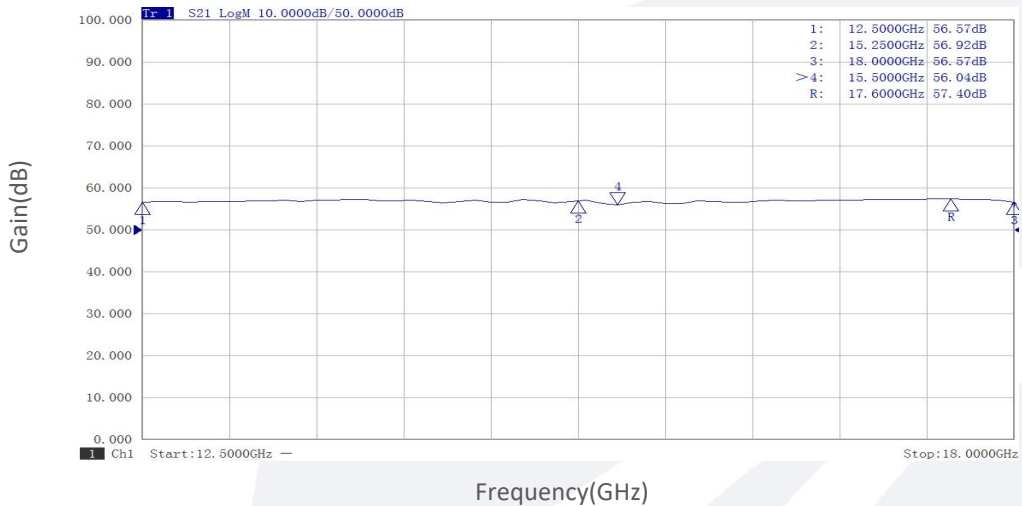
标准型号 Part Number	描述 Description	版本号Revision
TLPA12.5G18G-47-40	Power amplifier 12.5-18GHz, Gain 47dB, Psat:40dBm, +28V DC, Without Heatsink.	Rev.1.1
TLPA12.5G18G-47-40-HS	Power amplifier 12.5-18GHz, Gain 47dB, Psat:40dBm, +28V DC, With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

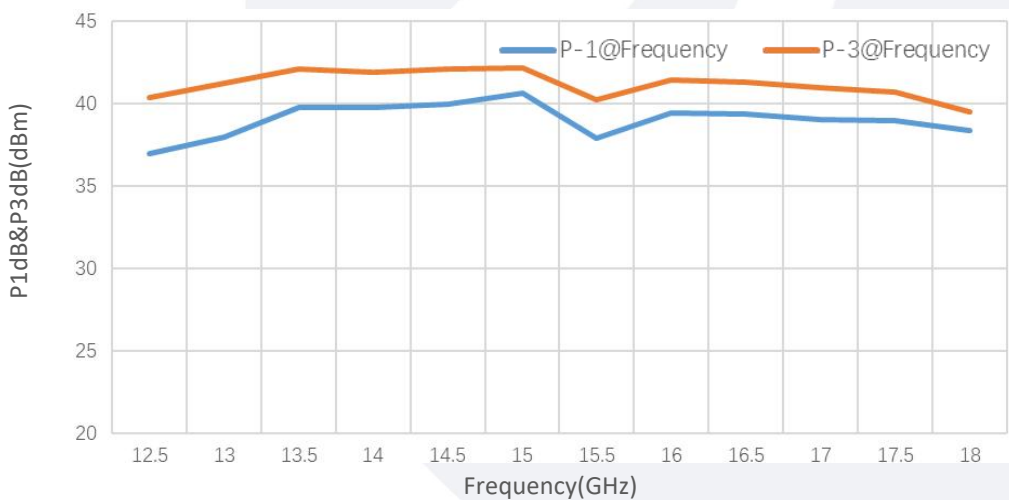
Input VSWR vs Frequency



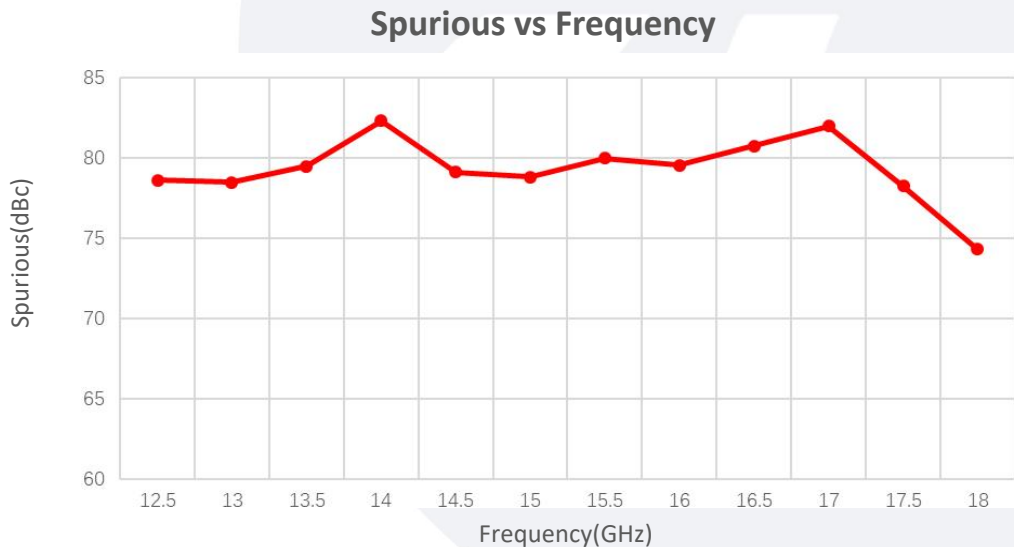
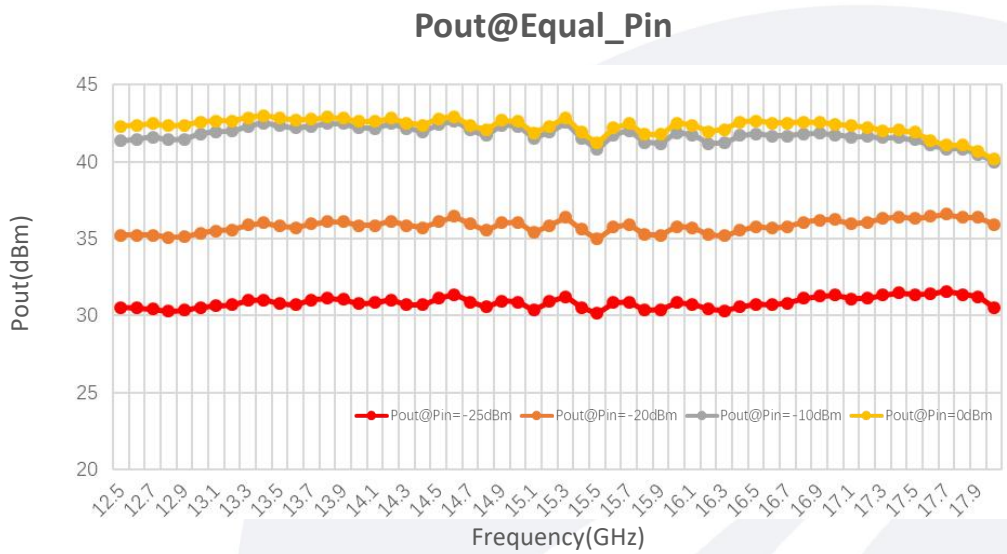
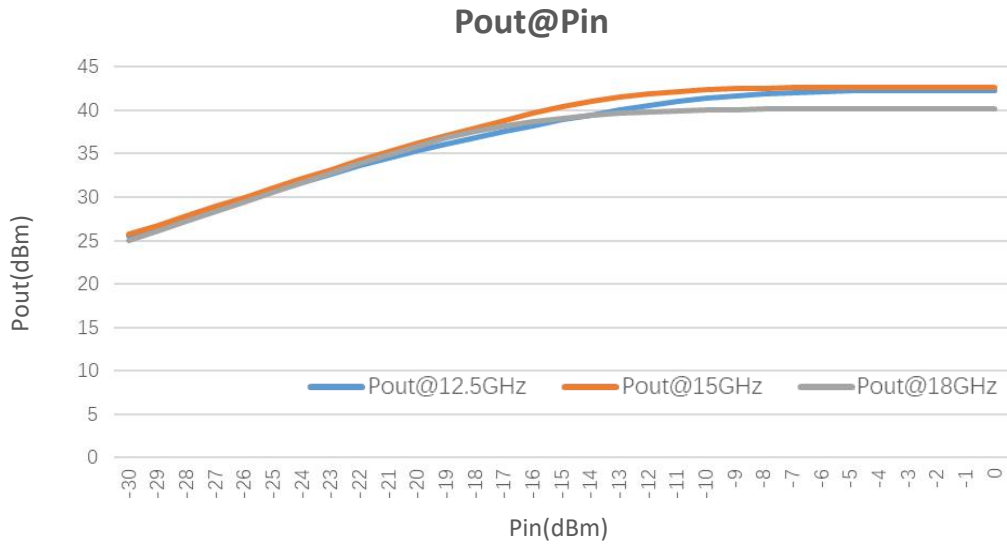
Gain vs Frequency



P1dB&P3dB vs Frequency



典型曲线 Typical Performance Data:



典型曲线 Typical Performance Data:

Harmonic vs Frequency

