

Model:TLPA0.5G3G-47-47
Power Amplifier
0.5-3GHz,Gain:47dB,Psat:47dBm
Feature:

- Ultra Wide Band: 0.5-3GHz
- Gain:47dB Min
- Psat Output Power:47dBm 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	0.5-3			GHz
增益 Gain	47			dB
增益平坦度 Gain Flatness			±2	dB
饱和输出功率 Output Psat	47			dBm
杂散 Spurious			-65	dBc
谐波 Harmonics			-10	dBc
输入驻波 Input VSWR			1.8	:1
直流电压 DC Voltage		+32	+33	V DC
直流电流 DC Supply Current		10		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	
DC加电接口 DC Power Interface	穿心电容	
尺寸 Size	35*40*12	mm
重量 Weight	/	g

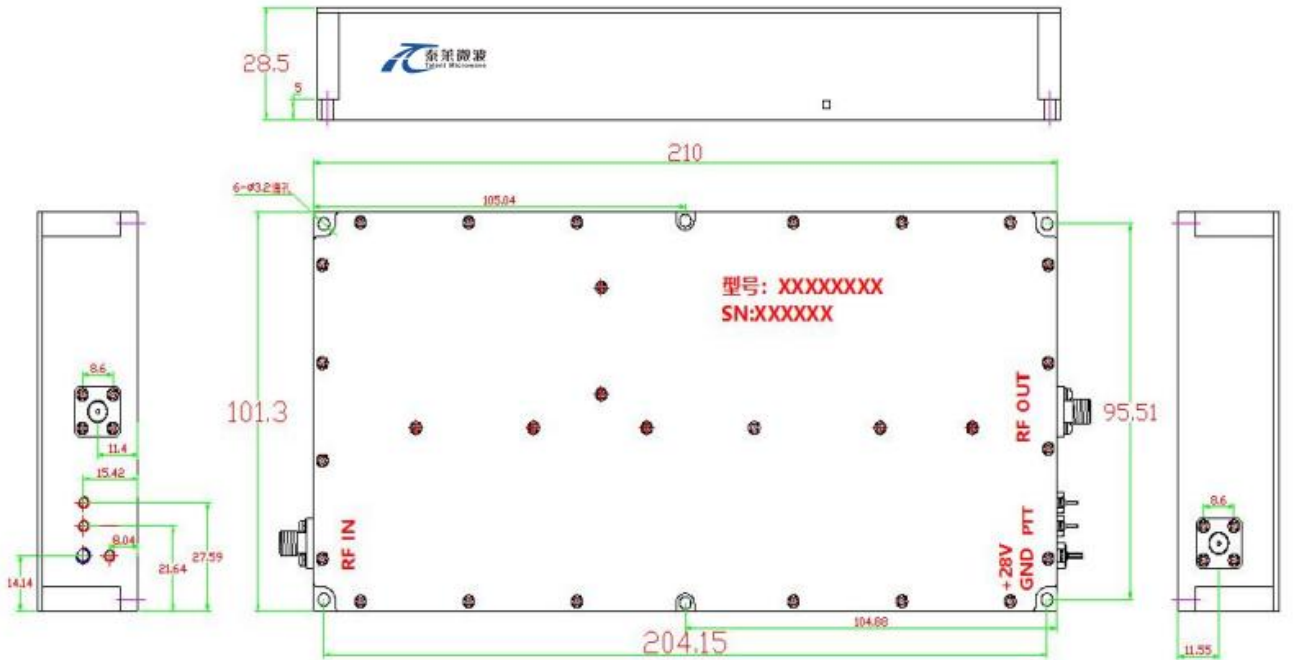
绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+32V
输入功率 RF Input Power	6dBm
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:

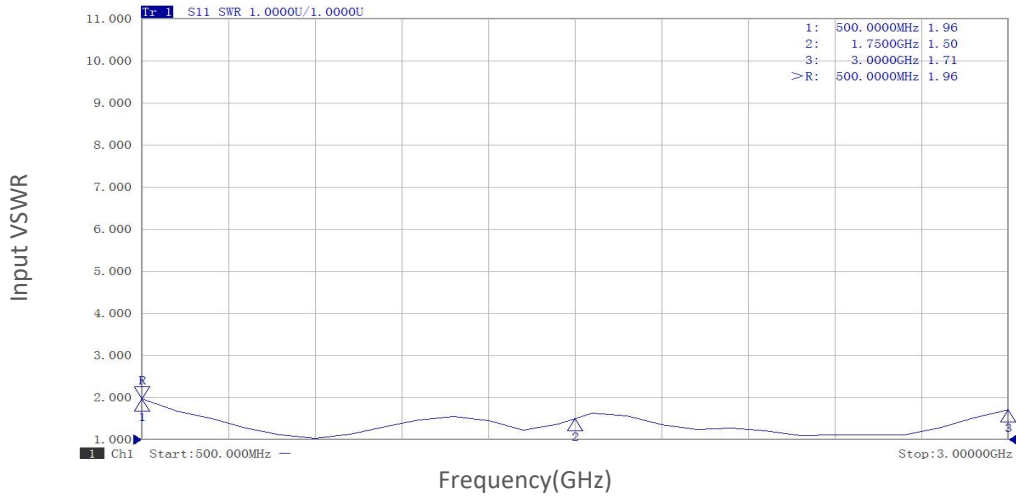
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-25		+55	°C
存储温度 Non-operating Temperature	-20		+75	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

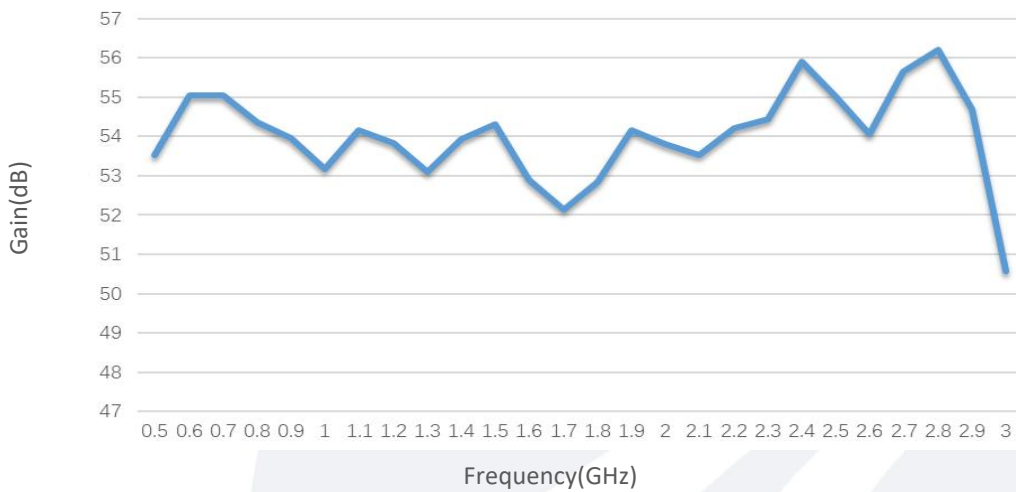
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.5G3G-47-47	Power amplifier 0.5-3GHz,Gain:47dB,Psat:47dBm,+32V DC,Without Heatsink.	Rev.1.1
TLPA0.5G3G-47-47-HS	Power amplifier 0.5-3GHz,Gain:47dB,Psat:47dBm,+32V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

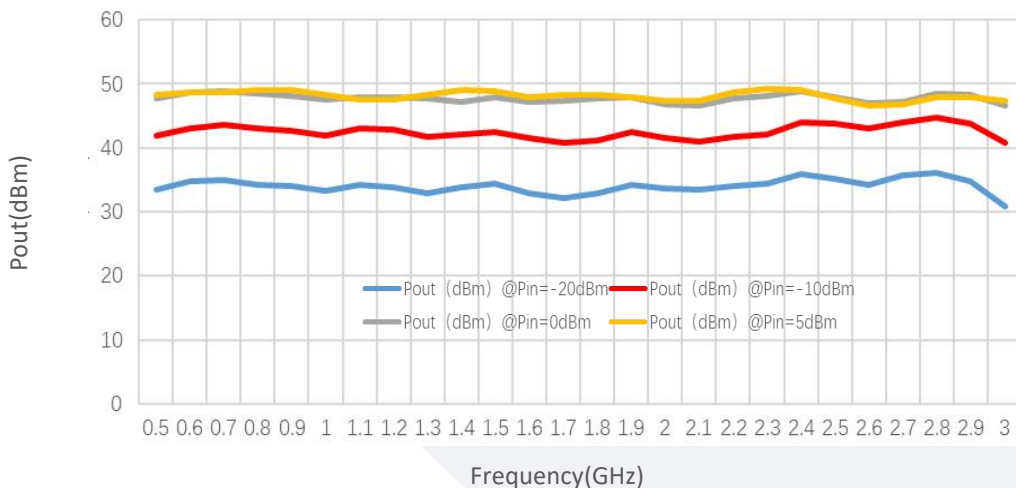
Input VSWR vs Frequency



Gain vs Frequency

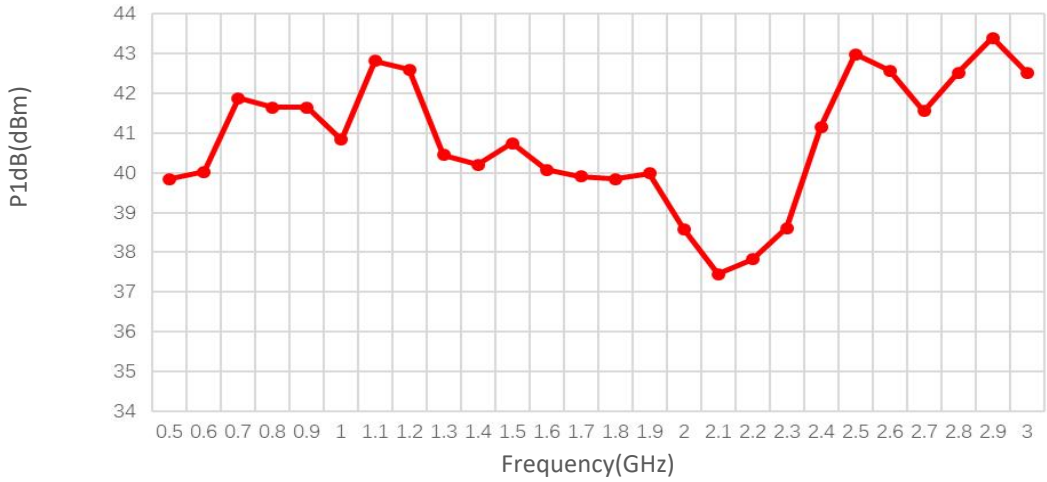


Pout@Equal_Pin

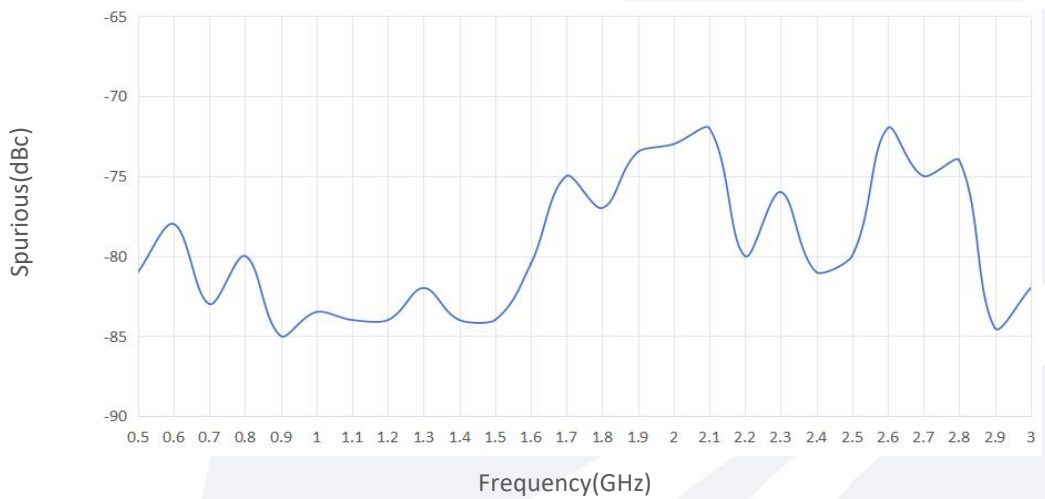


典型曲线 Typical Performance Data:

P1dB vs Frequency



Spurious vs Frequency



Pout@Pin

