

Model:TLPA0.1G4G-45-41
Power Amplifier
0.1-4GHz,Gain:45dB,Psat:41dBm
Feature:

- Ultra Wide Band: 0.1-4GHz
- Gain:45 dB Typ
- Psat Output Power: 41 dBm 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		0.1-4			GHz
增益 Gain			45		dB
增益平坦度 Gain Flatness			±3		dB
线性输出功率 Outout P1dB	0.1-1G		38		dBm
	1-4G		40		
饱和输出功率 Output Psat			41		dBm
输入驻波 Input VSWR				1.8	:1
直流电压 DC Voltage		+28			V DC
直流电流 DC Supply Current			2.5		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	140*80*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	+28V
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

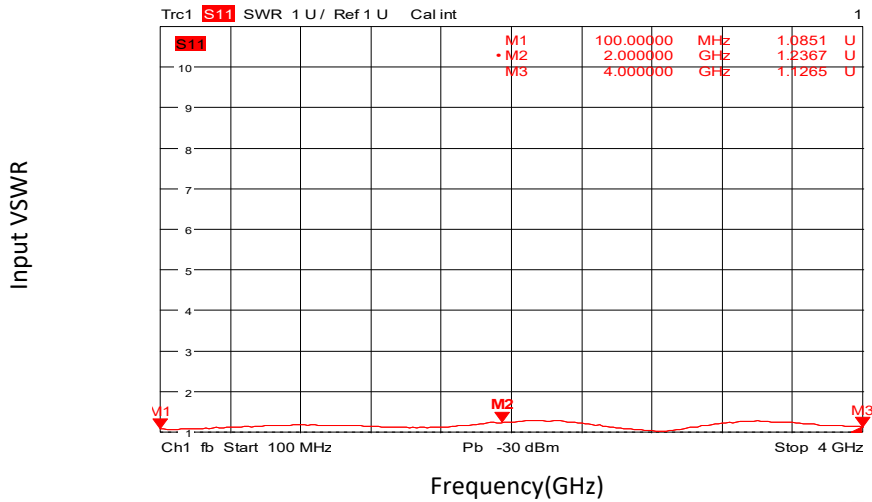
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+75	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

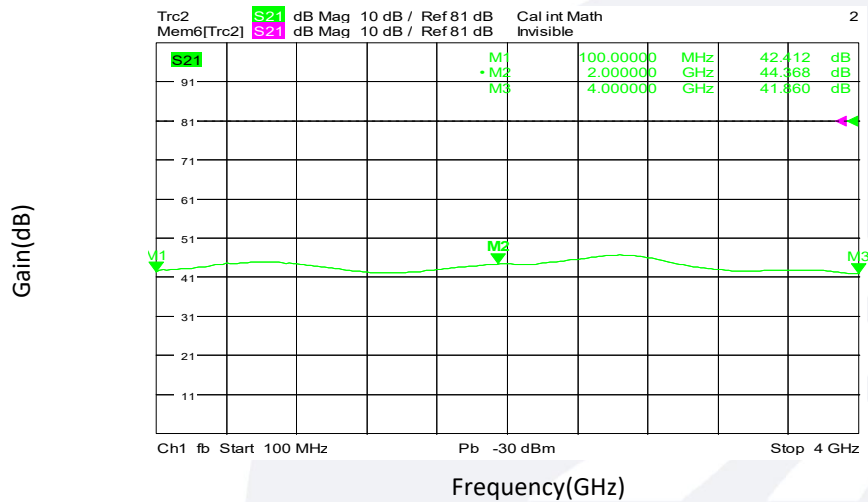
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.1G4G-45-41	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.1G4G-45-41-HS	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

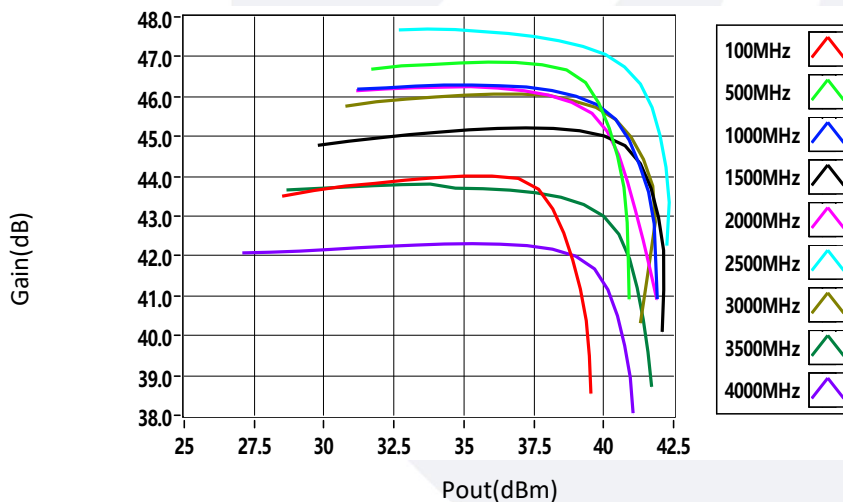
Input VSWR vs Frequency



Gain vs Frequency

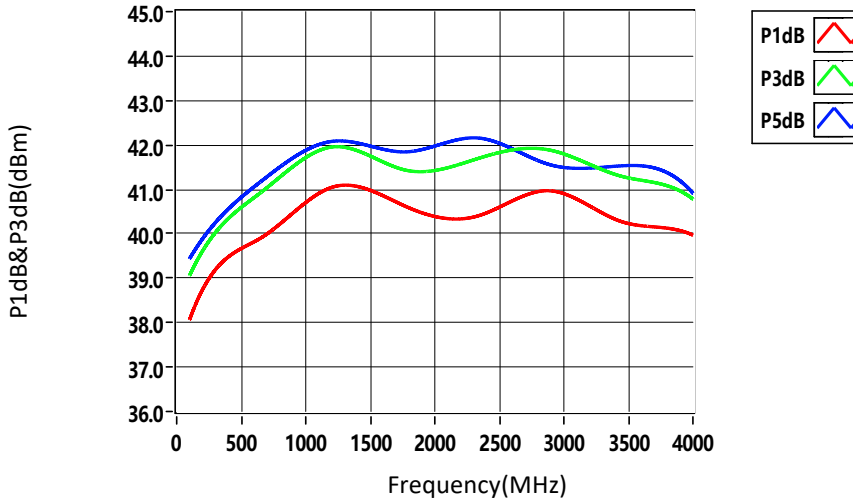


Gain vs Output Power

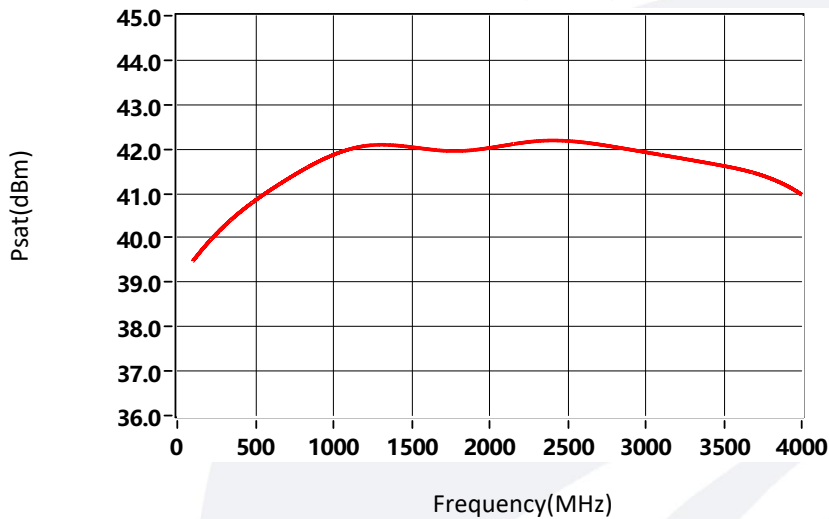


典型曲线 Typical Performance Data:

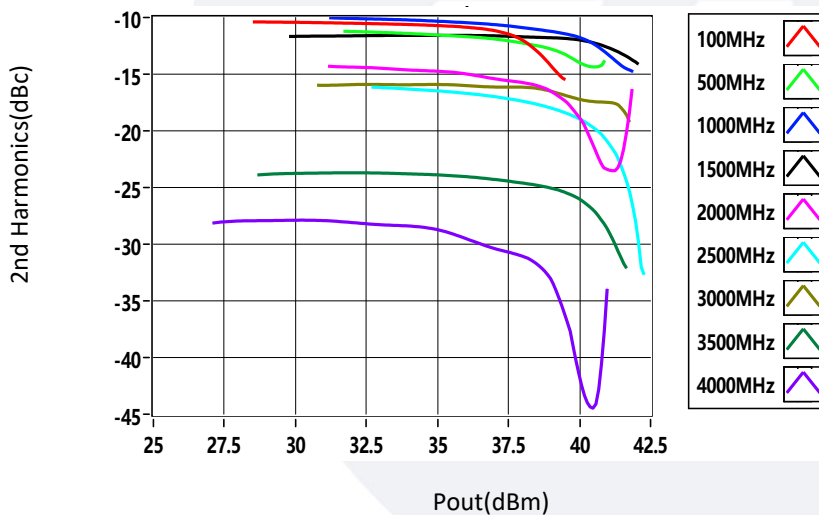
P1dB&P3dB vs Frequency



Psat VS Frequency



2nd Harmonics VS Output Power



典型曲线 Typical Performance Data:

3rd Harmonics VS Output Power

