

Model:TLPA0.1G22G-30-27
Power Amplifier
0.1-22GHz,Gain:30dB,P1dB:29dB
Feature:

- Ultra Wide Band: 0.1-22GHz
- Gain: 30dB Min
- Psat Output Power: 27 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output
- Noise Figures degrade below 500 MHz.

电气特性 Electrical:

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	0.1-22			GHz
增益 Gain	30	33		dB
增益平坦度 Gain Flatness		±2.0		dB
线性输出功率P1dB	26	29		dB
饱和输出功率 Psat	27	30		dBm
输入驻波 Input VSWR		1.6	2.0	:1
输出驻波 Output VSWR		1.6	2.0	:1
直流电压 DC Voltage		24		V DC
直流电流 DC Supply Current	850			mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

参数Parameter	指标 Value	单位Units
输入输出接Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	58.5*38*12	mm
重量 Weight	200	g

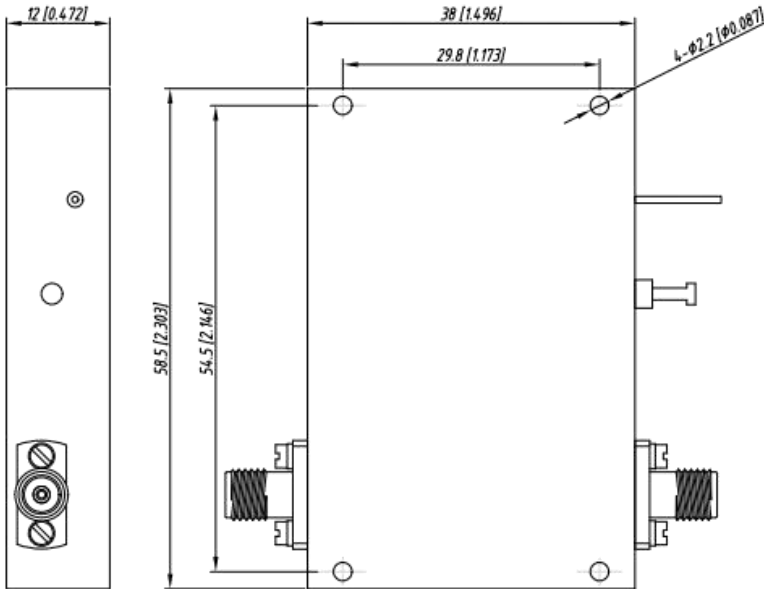

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	/
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(inches)



温度环境 Environmental Conditions:

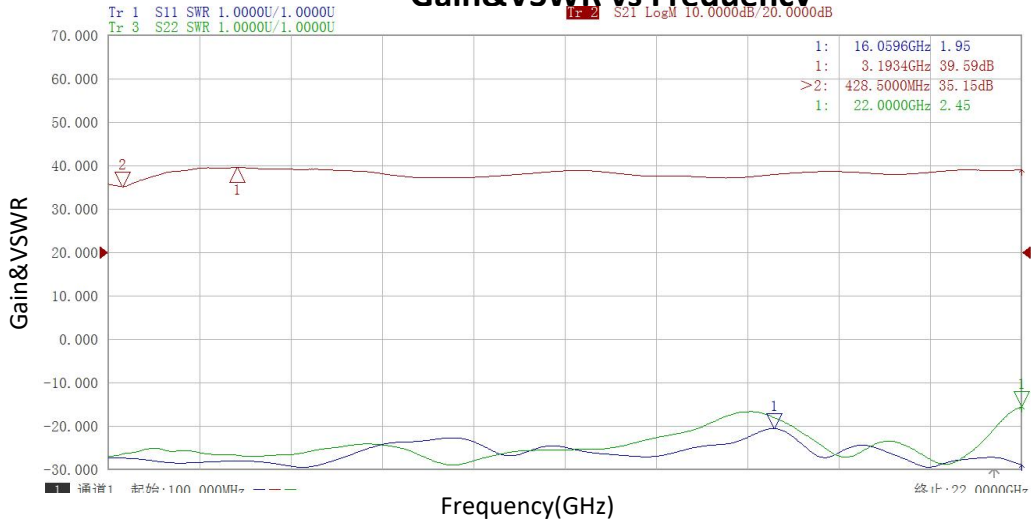
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	100%RH at 35°C, 95%RH at 40°C			%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

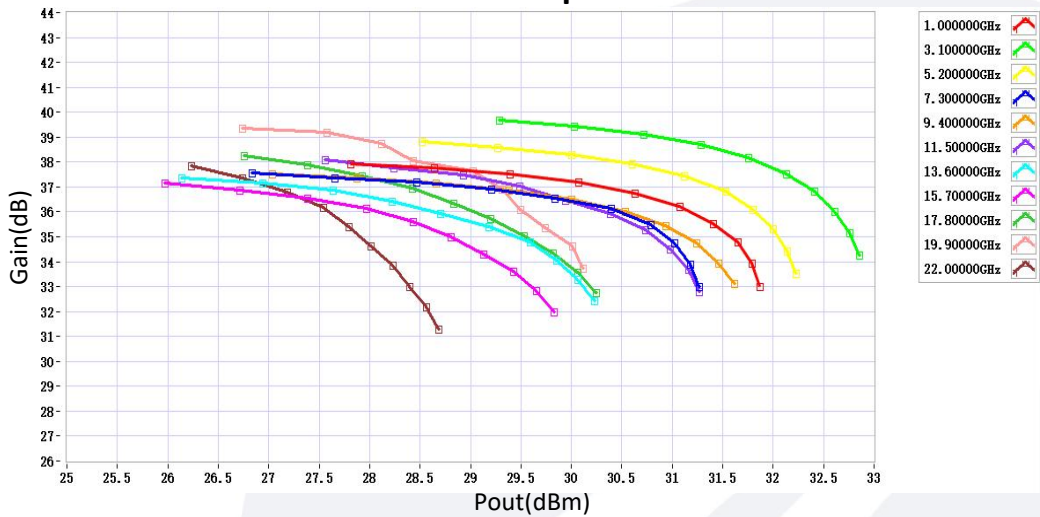
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.1G22G-30-27	Power amplifier 0.1-22GHz,Gain:33dB,P1dB:29dBm,24V DC,,SMA-Female,Without Heatsink	Rev.1.1
TLPA0.1G22G-30-27-HS	Power amplifier 0.1-22GHz,Gain:33dB,P1dB:29dBm,24V DC,,SMA-Female,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

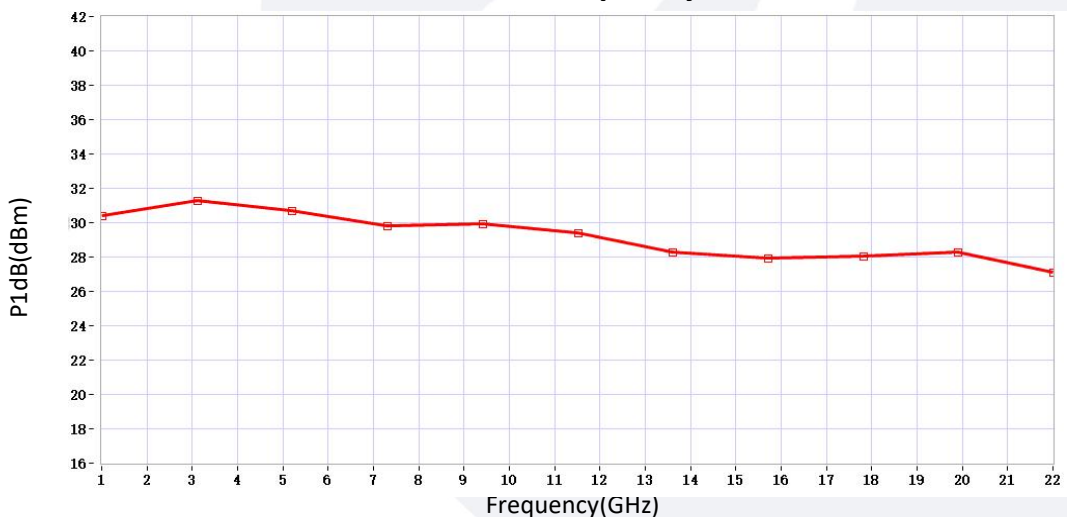
Gain&VSWR vs Frequency



Gain vs Output Power

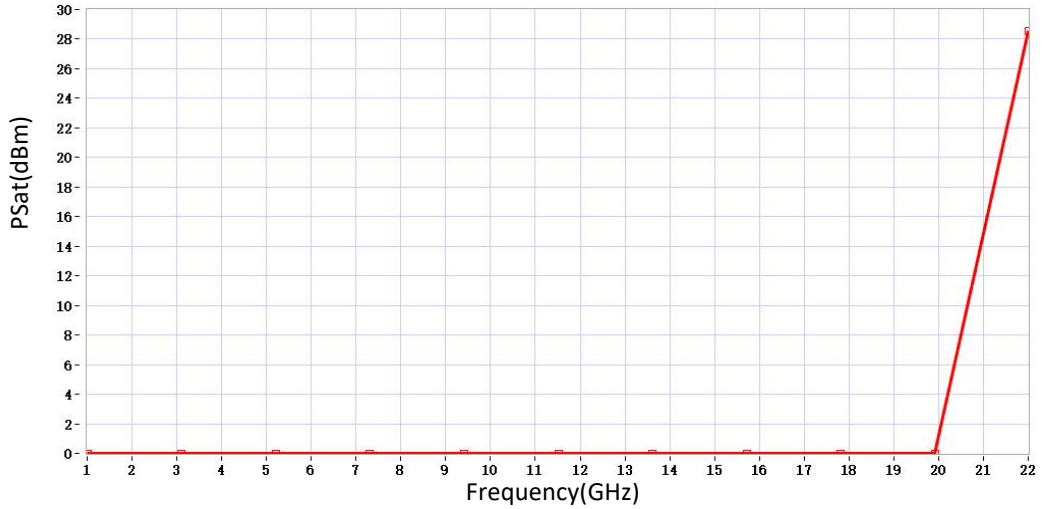


P1dB vs Frequency

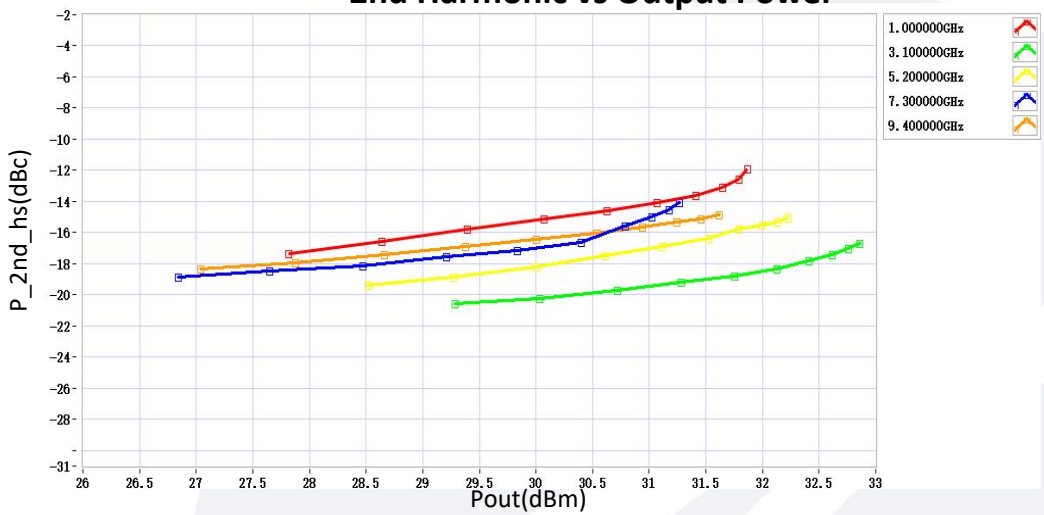


典型曲线 Typical Performance Data:

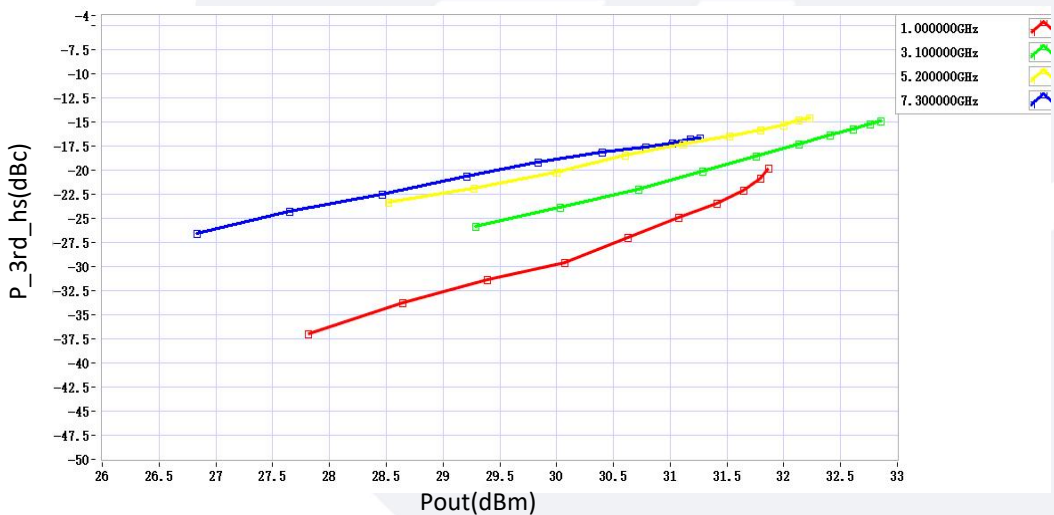
PSat vs Frequency



2nd Harmonic vs Output Power



3rd Harmonic vs Output Power



典型曲线 Typical Performance Data:

Current vs Output Power

