

Model:TLPA0.1G20G-30-30
Power Amplifier
0.1-20GHz, Gain:30dB, Psat:30dBm
Feature:

- Ultra Wide Band: 0.1-20GHz
- Gain:30dB Min
- Psat Output Power: 30dBm 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	0.1-20			GHz
增益 Gain	30			dB
小信号增益 Small-signal Gain@2-8GHz		35		dB
增益平坦度 Gain Flatness		±2		dB
线性输出功率 Output P1dB		28		dBm
饱和输出功率 Output Psat		30		dBm
噪声系数 Noise Figure		3		dB
杂散 Spurious		-60		dBc
谐波 Harmonic		-10		dBc
输入驻波 Input VSWR		2.0		:1
输出驻波 Output VSWR		3.0		:1
直流电压 DC Voltage		+24		V DC
直流电流 DC Supply Current			800	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	TBD	
尺寸 Size	60*65*11	mm
重量 Weight	≤500	g

绝对最大值 Absolute Maximum Ratings:

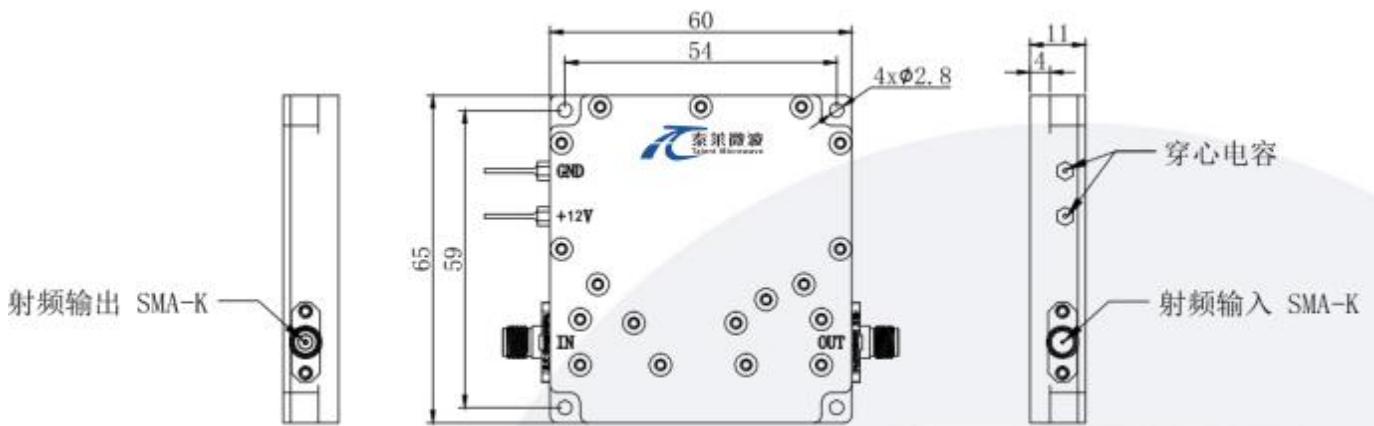
参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	PIN1: +24V PIN2: GND
输入功率 RF Input Power	0dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System Benchtop Amplifier

外形尺寸 Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

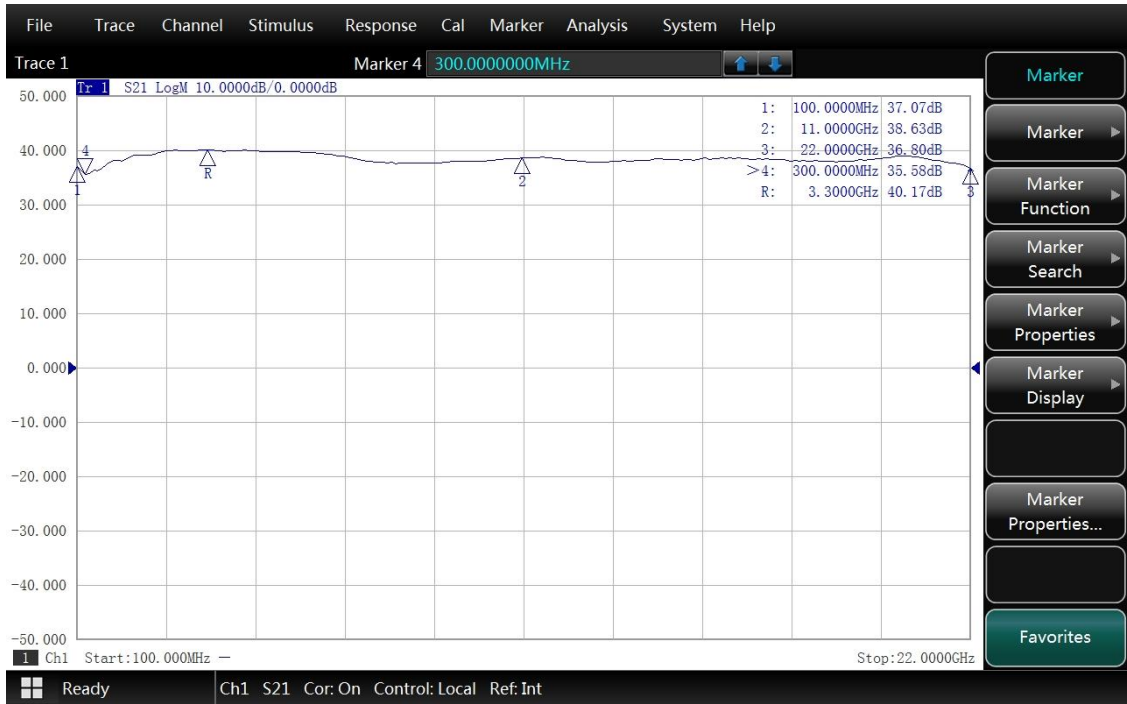
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+60	°C
存储温度 Non-operating Temperature	-20		+75	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

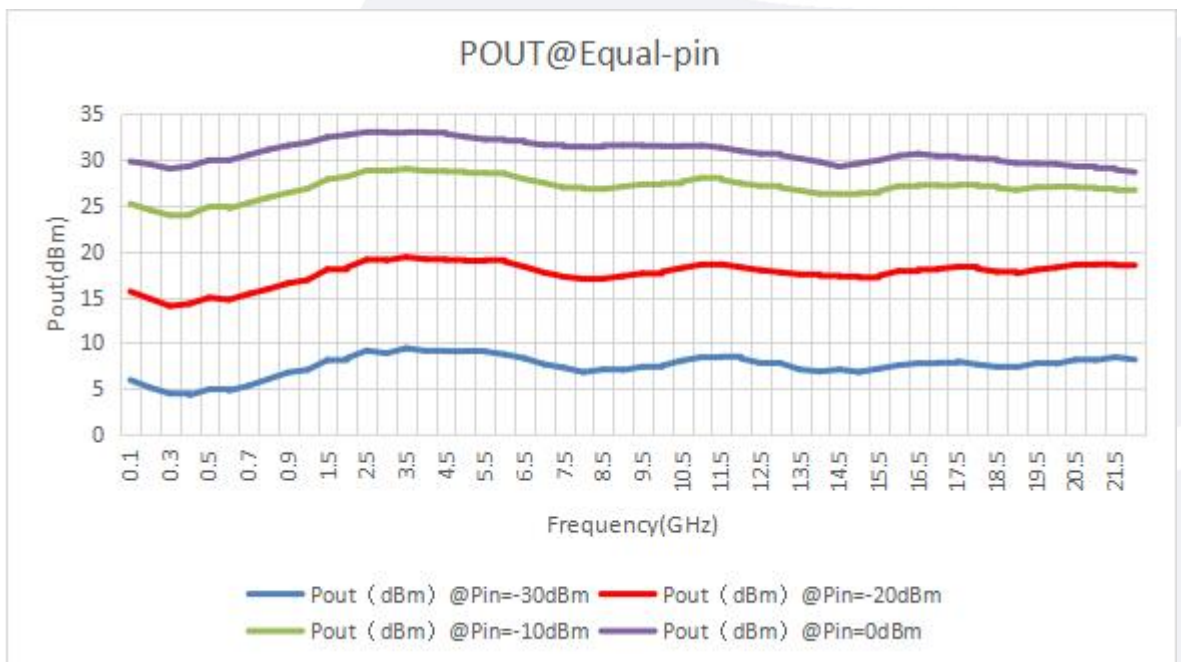
标准型号 Part Number	描述 Description	版本号 Revision
TLPA0.1G20G-30-31	Power amplifier 0.1-20GHz, Gain:30dB, Psat:30dBm, +24V DC, Without Heatsink.	Rev.1.1
TLPA0.1G20G-30-31-HS	Power amplifier 0.1-20GHz, Gain:30dB, Psat:30dBm, +24V DC, With Heatsink.	Rev.1.1

实测数据 Measured data:

1. 增益 Gain

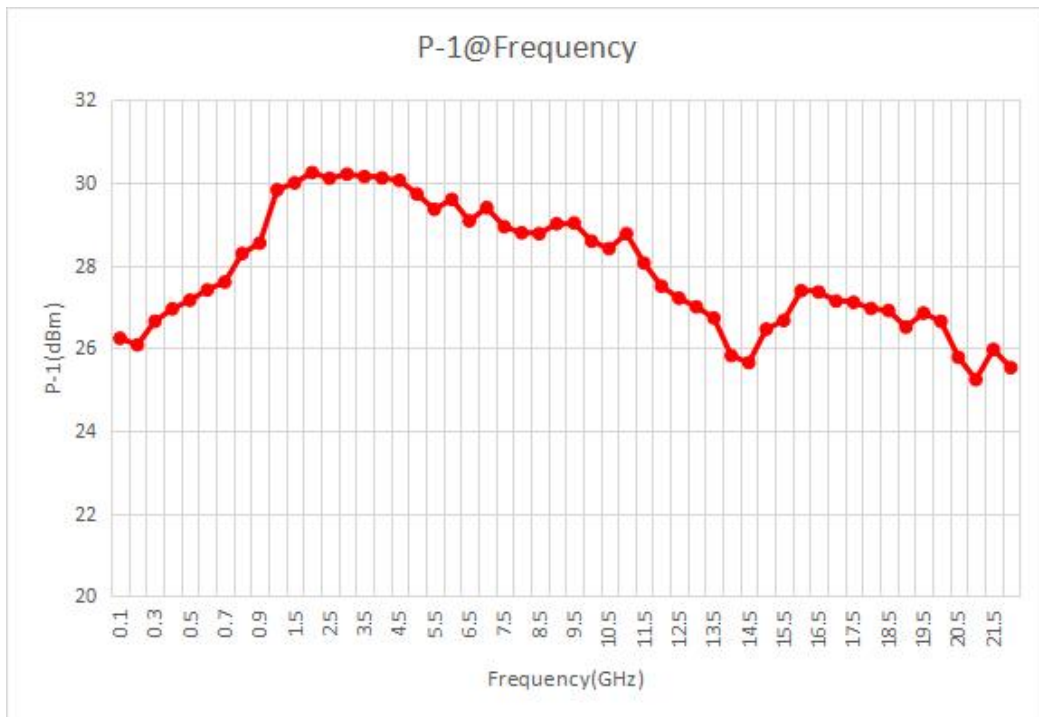


2. 输出功率 Output Power

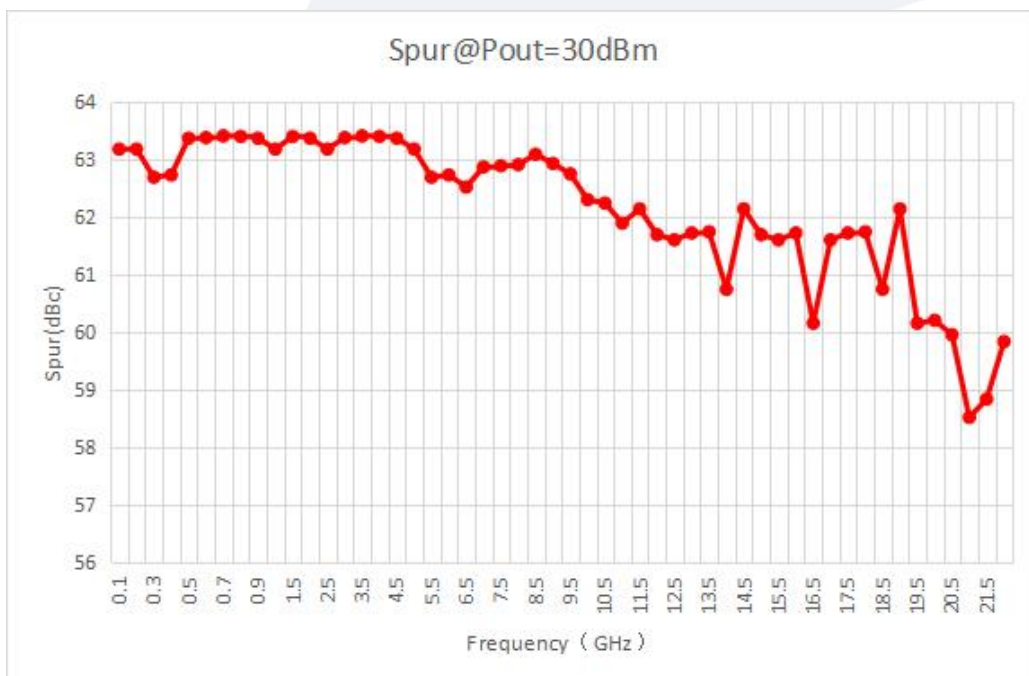


实测数据 Measured data:

3. 线性输出功率 Output P1dB

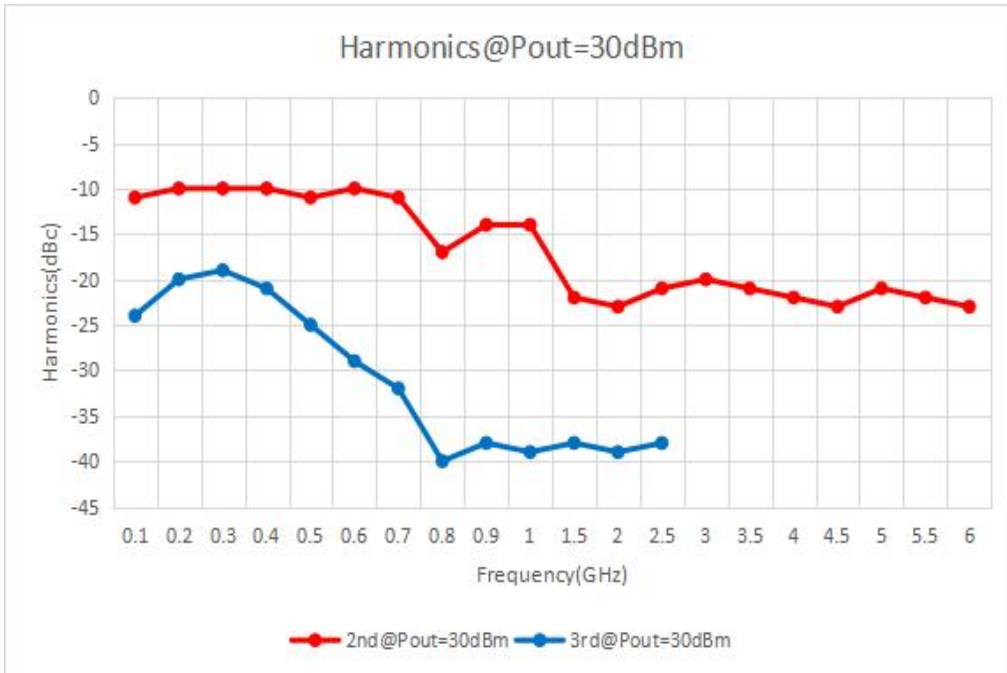


4. 杂散抑制 Spurious

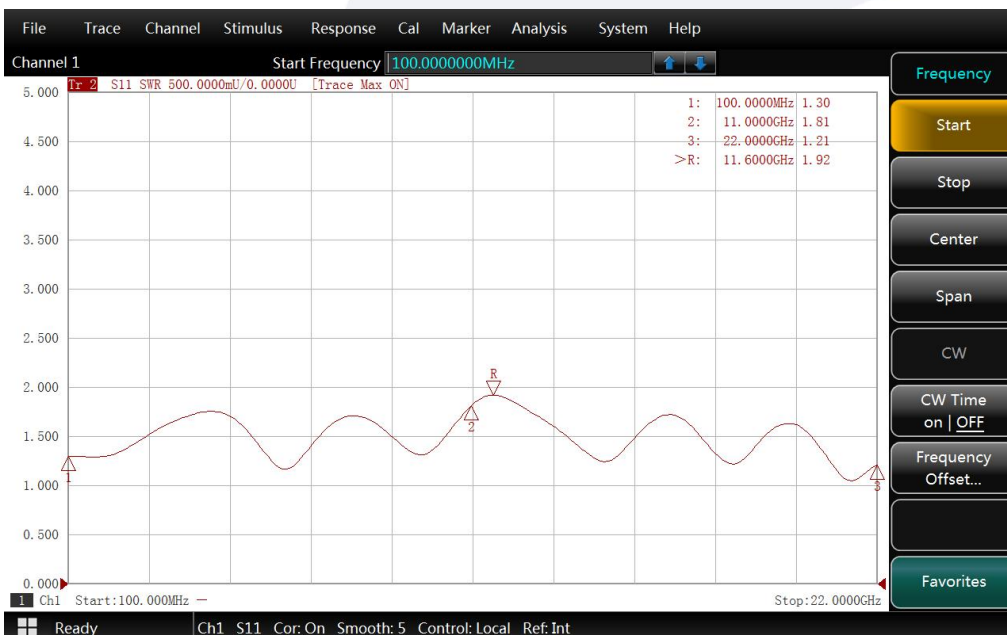


实测数据 Measured data:

5. 谐波 Harmonics

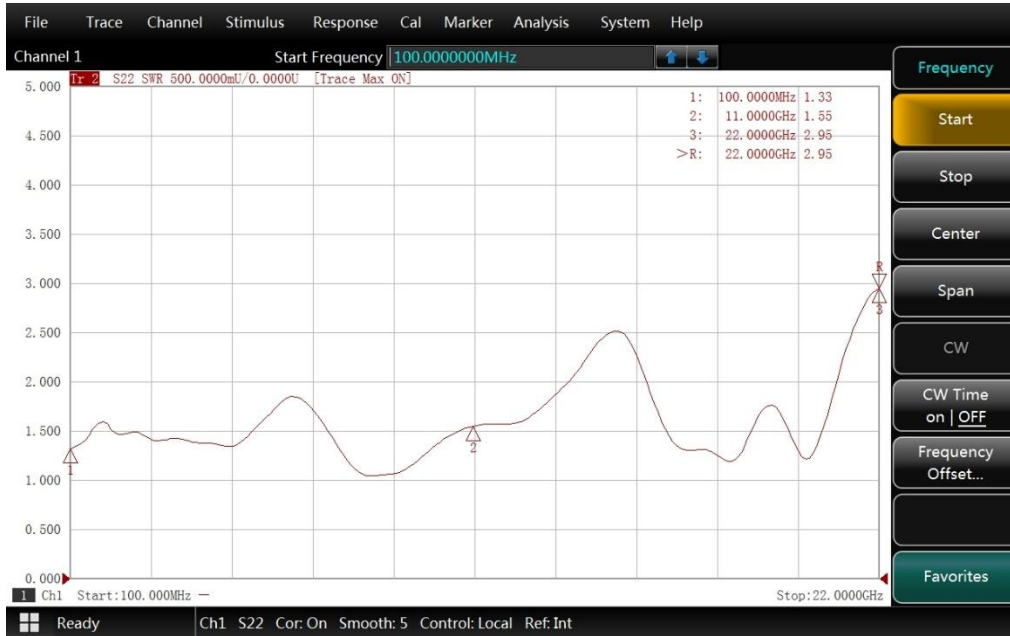


6. 输入驻波 Input VSWR



实测数据 Measured data:

7. 输出驻波 Output VSWR



8. 功耗 Power Dissipation

