

Model: TLPA0.1G22G-31-32
Power Amplifier
0.1-22GHz, Gain: 30dB, P1dB: 30dBm
Feature:

- Ultra Wide Band: 0.1-22 GHz
- P1dB Output Power: 30 dBm 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	0.1-22			GHz
增益 Gain*	28	30		dB
增益平坦度 Gain Flatness		±5		dB
线性输出功率 Output P1dB*	30			dBm
杂散 Supurious		60		dBc
输入/输出驻波 Input/Output VSWR*			2.2	:1
直流电压 DC Voltage	+18			V DC
直流电流 DC Supply Current	0.9			A
阻抗 Impedance	50			Ohms

*Note: These parameters deteriorate after 20 GHz

机械特性 Mechanical Specifications:

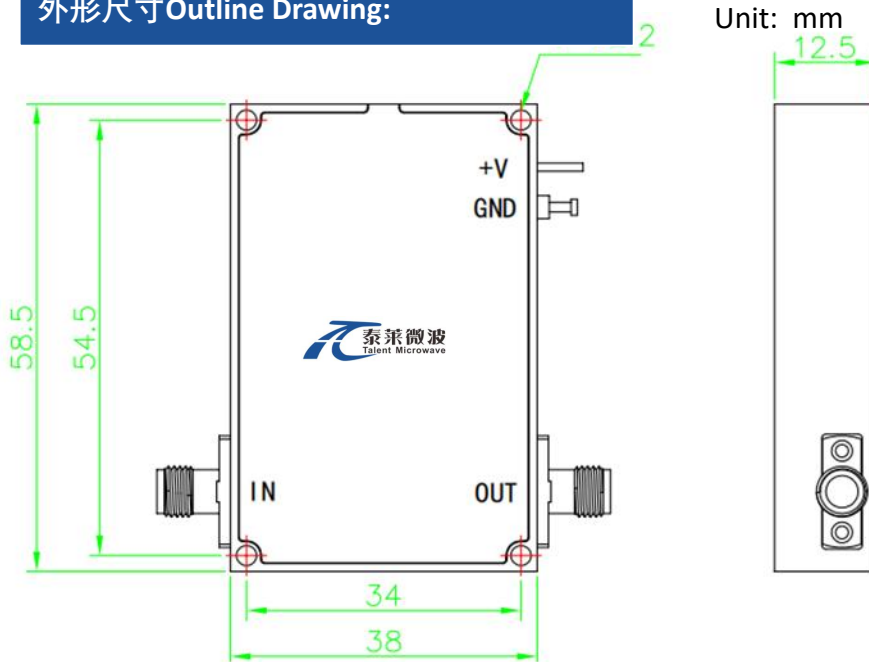
参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	38*58.5*12.5	mm
重量 Weight	200	g

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+18 V
输入功率 RF Input Power	+10 dBm
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*	-50		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			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			

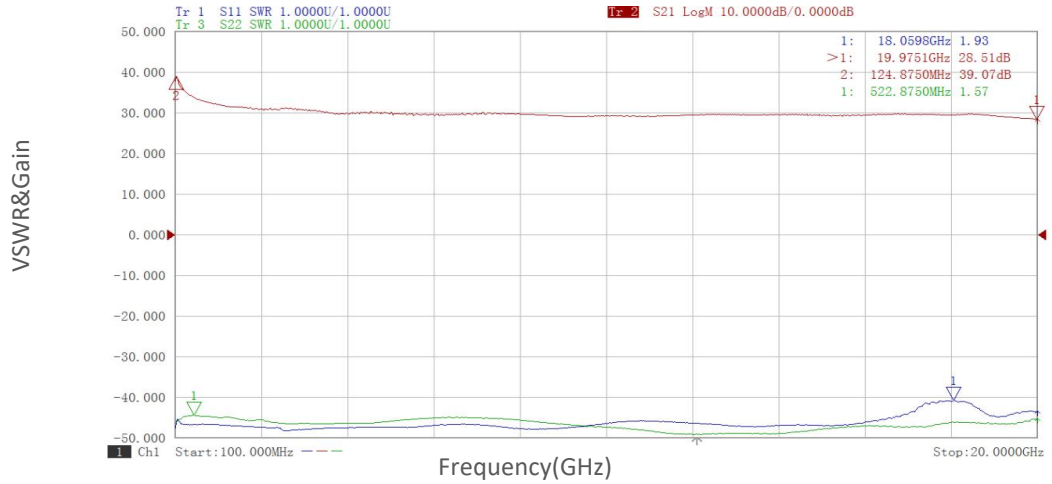
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

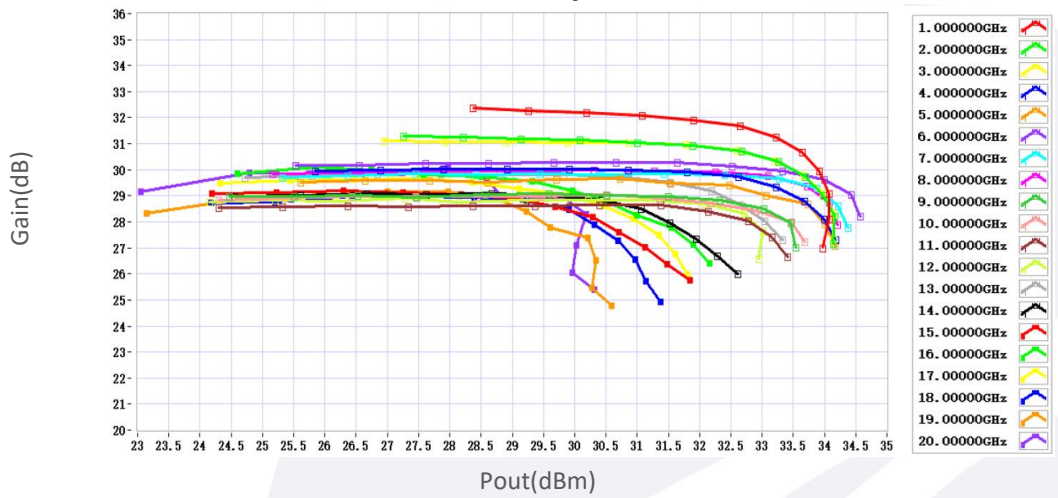
标准型号 Part Number	描述 Description	版本号 Revision
TLPA0.1G22G-31-32	Power amplifier 0.1-22GHz, Gain:30dB, P1dB:30dBm, +18V DC, Without Heatsink	Rev.1.1
TLPA0.1G22G-31-32-HS	Power amplifier 0.1-22GHz, Gain:30dB, P1dB:30dBm, +18V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

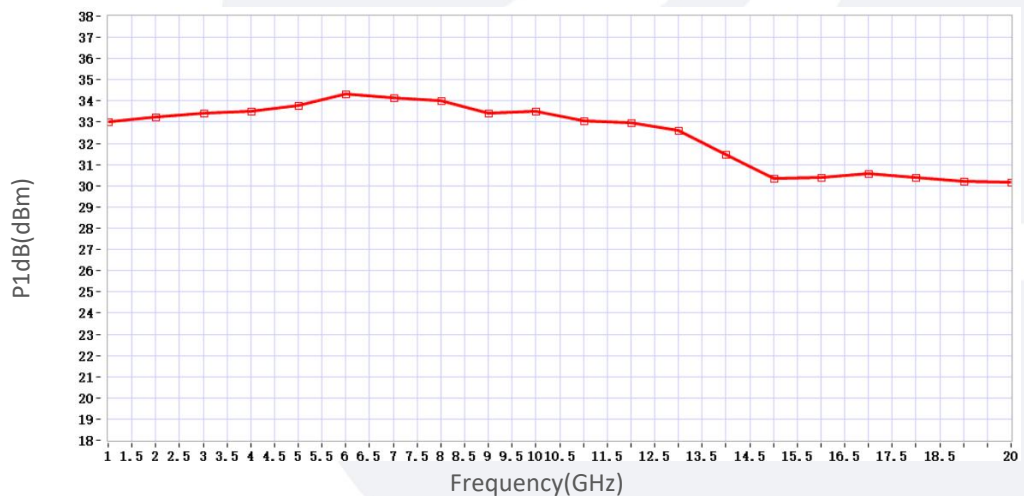
VSWR&Gain vs Frequency



Gain vs Output Power



P1dB vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.