

**Model:TLPA50K20G-28-20**
**Power Amplifier**  
**50KHz-20GHz,Gain:28dB,Psat:20dBm**
**Feature:**

- Ultra Wide Band: 50KHz-20GHz
- Gain: 28 dB Typ
- Psat Output Power: 20 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	50KHz-20GHz			
增益 Gain		28		dB
增益平坦度 Gain Flatness			±1.5	dB
饱和输出功率 Output Psat	18.5	20		dBm
噪声系数 Noise Figure		3		dB
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage		+8		V DC
直流电流 DC Supply Current		120		mA
阻抗 Impedance		50		Ohms

**机械特性 Mechanical Specifications:**

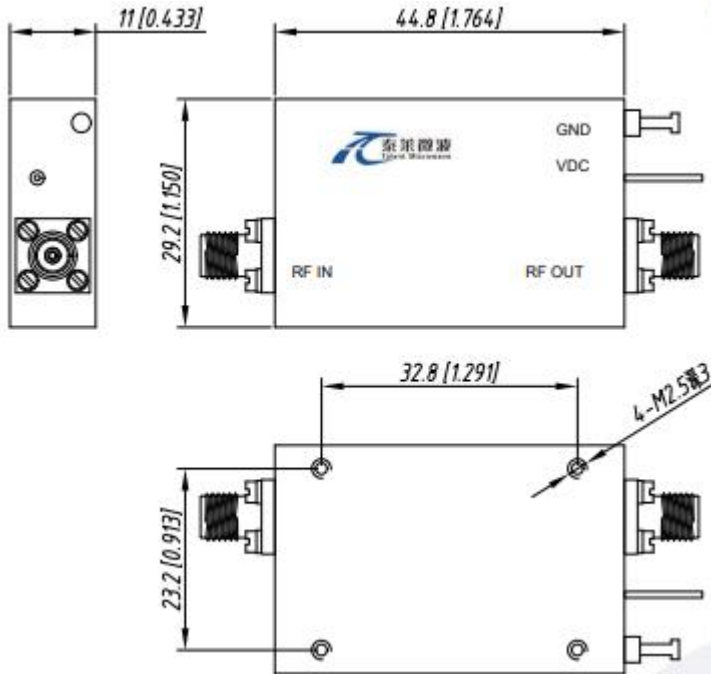
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44.8*32.8*11	mm
重量 Weight	/	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+10V
输入功率 RF Input Power	12 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:

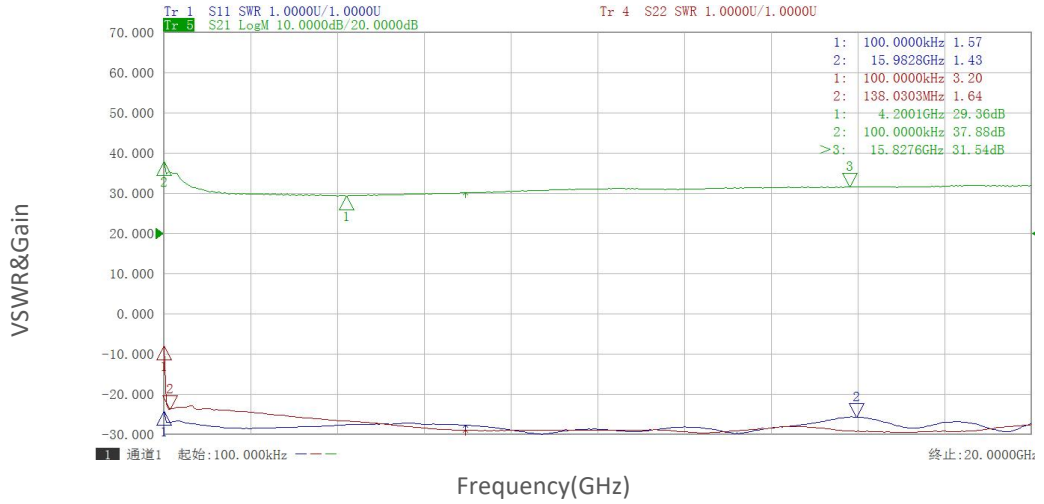
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

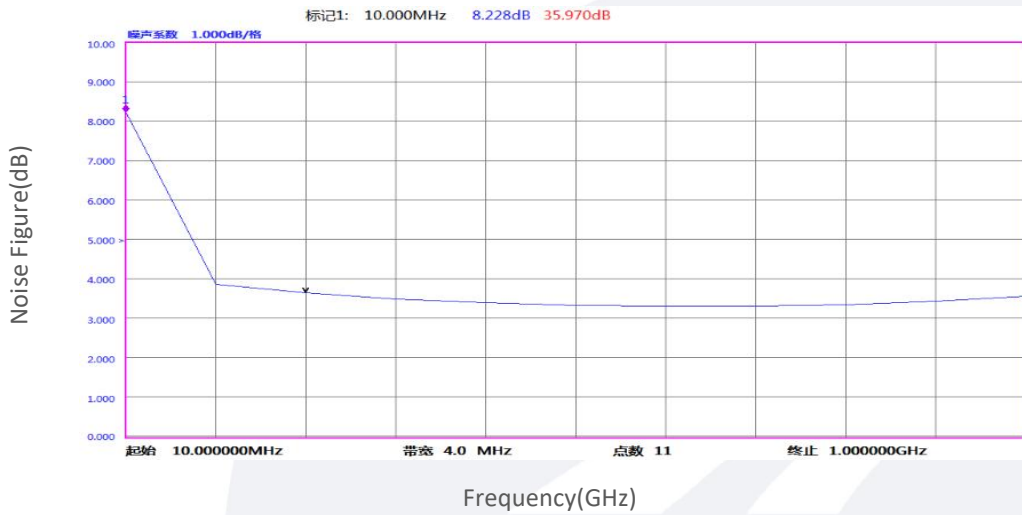
标准型号 Part Number	描述 Description	版本号 Revision
TLPA50K20G-28-20	Power amplifier 50KHz-20GHz, Gain:28dB, Psat:20dBm, +8V DC, Without Heatsink	Rev.1.1
TLPA50K20G-28-20-HS	Power amplifier 50KHz-20GHz, Gain:28dB, Psat:20dBm, +8V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

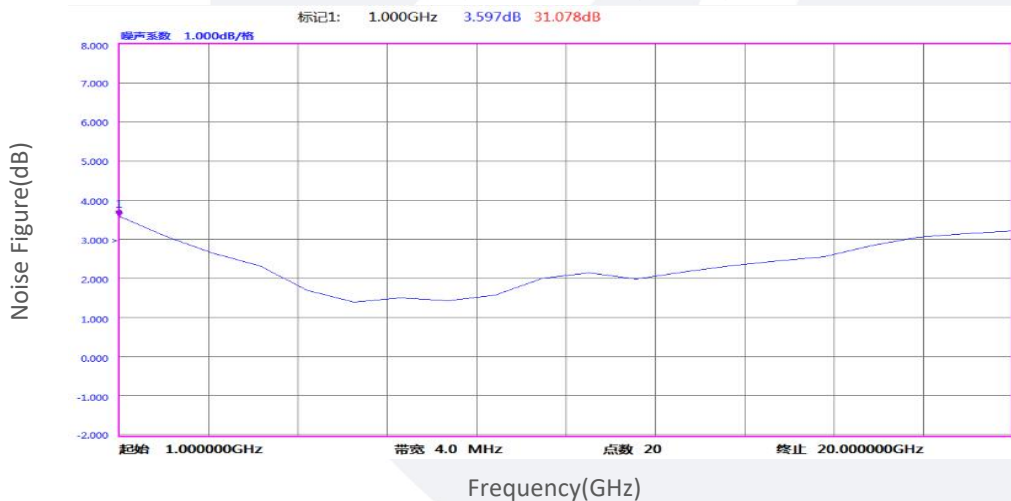
**VSWR&Gain vs Frequency**



**Noise Figure vs Frequency**



**Noise Figure vs Frequency**



典型曲线 Typical Performance Data:

P1dB vs Frequency

