

**Model:TLPA0.01G18G-31-25**
**Power Amplifier**
**0.01G-18GHz, Gain:31dB, Psat:25dBm**
**Feature:**

- Ultra Wide Band: 0.01G-18GHz
- Gain: 31dB Min
- Psat Output Power: 25 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	0.01-18			GHz
增益 Gain	27	31		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB	24	25		dBm
饱和输出功率 Output Psat	25	27		dBm
噪声系数 Noise Figure		2.5	5.5	dB
输入驻波 Input VSWR		2	2.5	:1
输出驻波 Output VSWR		1.8	2.4	:1
直流电压 DC Voltage	+10.5	+12	+15	V DC
直流电流 DC Supply Current	450			mA
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

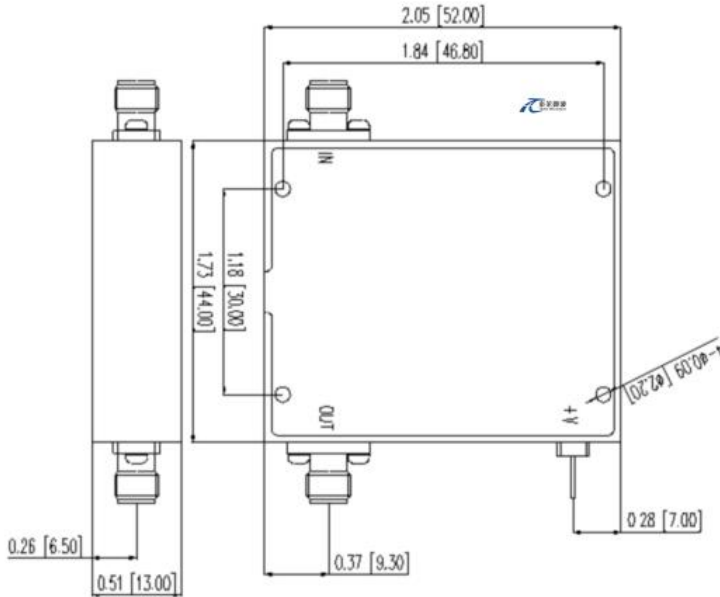
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	20.5*17.3*5.1	mm
重量 Weight	50	g


**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	10dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



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



温度环境 Environmental Conditions:

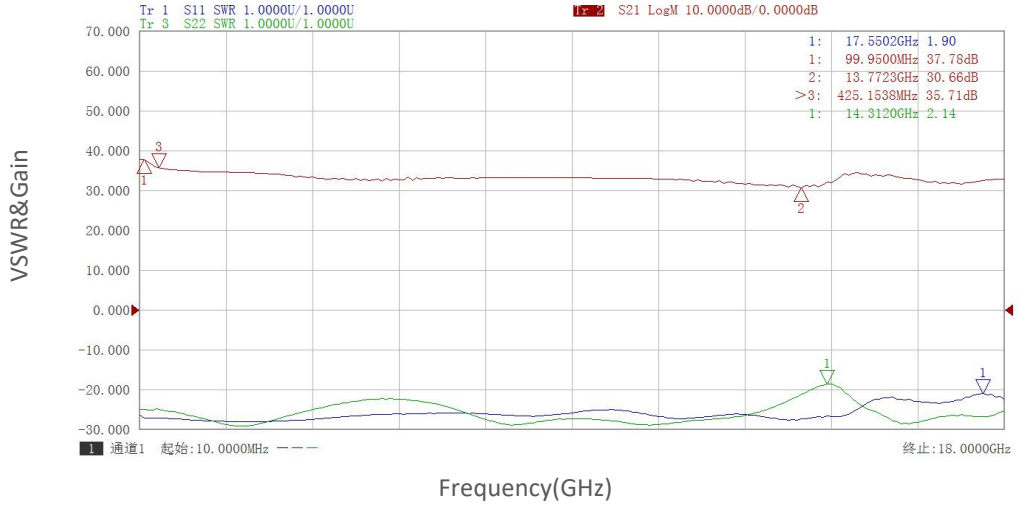
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	100%RH at 35°C, 95%RH at 45°C			%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

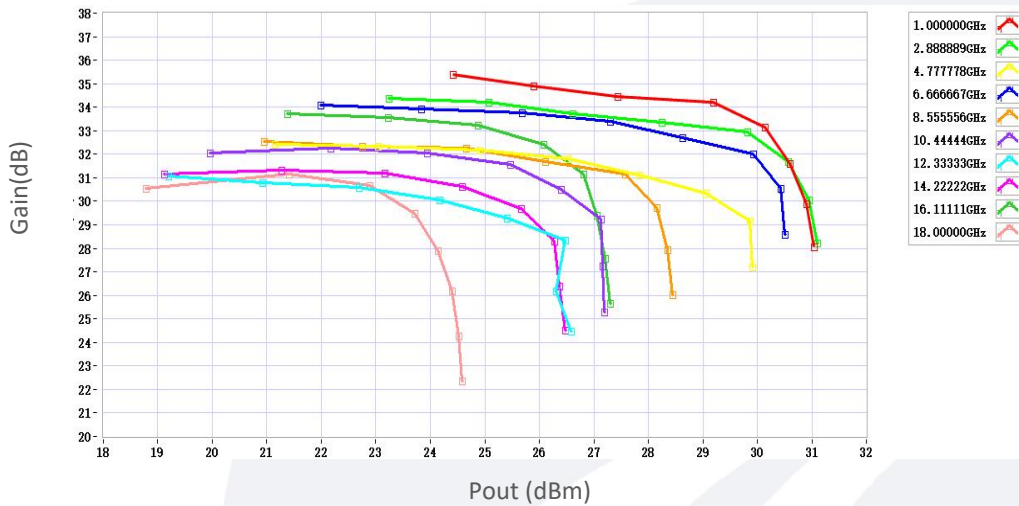
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.01G18G-31-25	Power amplifier 10MHz-18GHz, Gain:31dB, Psat:25dBm, +12V DC.	Rev.1.1

典型曲线 Typical Performance Data:

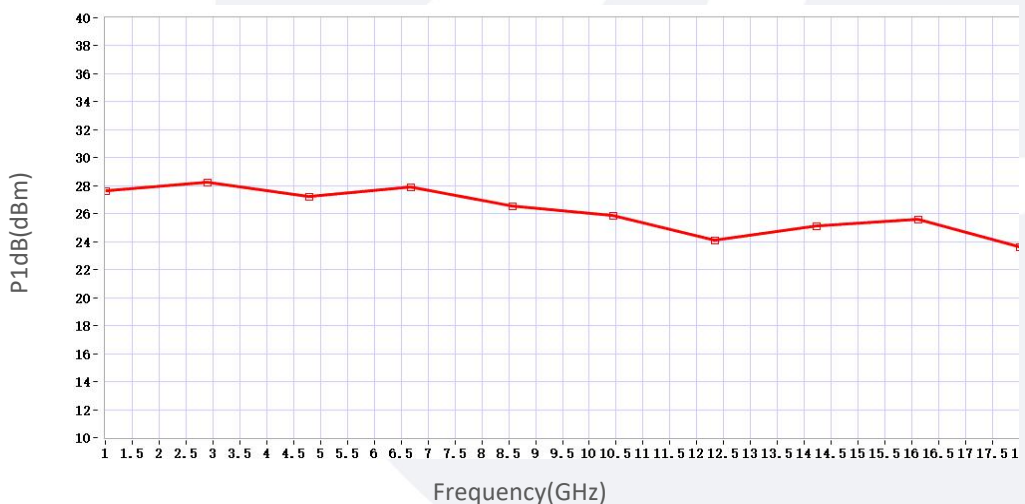
**VSWR&Gain vs Frequency**



**Gain vs Output Power**

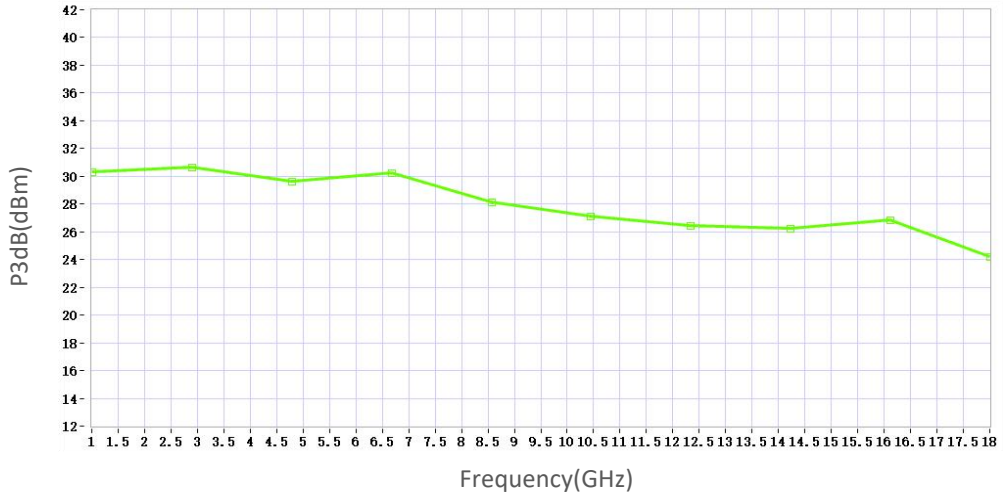


**P1dB vs Frequency**



典型曲线 Typical Performance Data:

**P3dB vs Frequency**



**Psat vs Frequency**

