

Model:TLPA50K6G-33-33
Power Amplifier
50KHz-6GHz,Gain:33dB,Psat:38dBm
Feature:

- Ultra Wide Band: 50KHz-6GHz
- Gain: 33 dB Min
- Psat Output Power: 33 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	0.05-6000			MHz
小信号增益 Small Signal Gain	33	34		dB
增益平坦度 Gain Flatness			±4	dB
线性输出功率 Output P1dB		30		dBm
饱和输出功率 Output Psat	32	33		dBm
谐波抑制 Harmonic			-10	dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current	600			mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

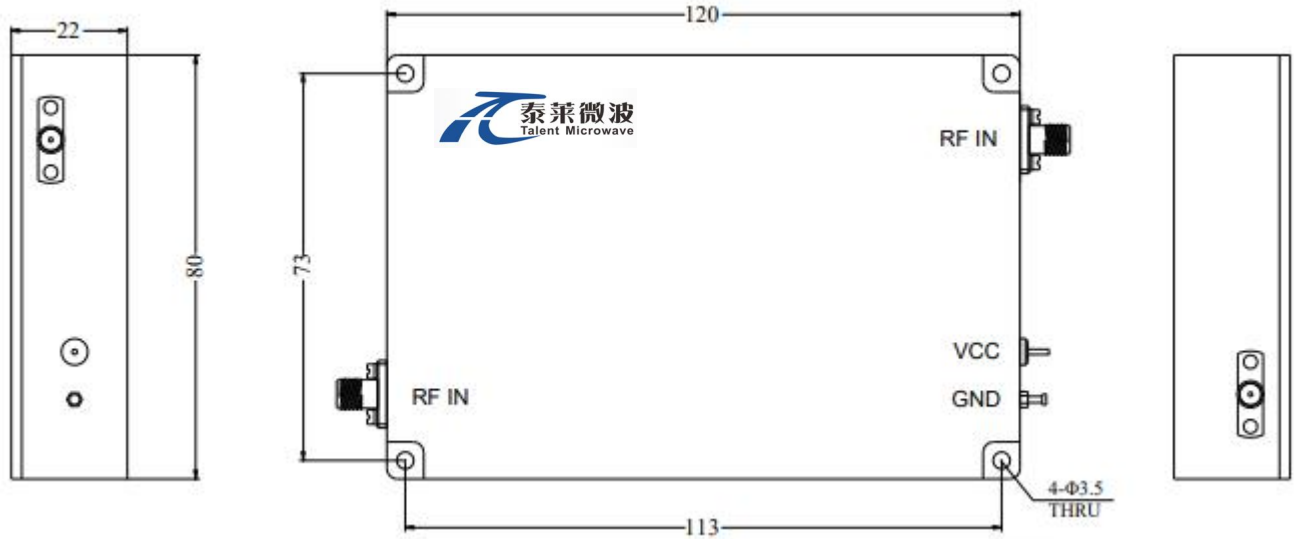
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	120*80*22	mm
重量 Weight	200	g

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30V
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



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

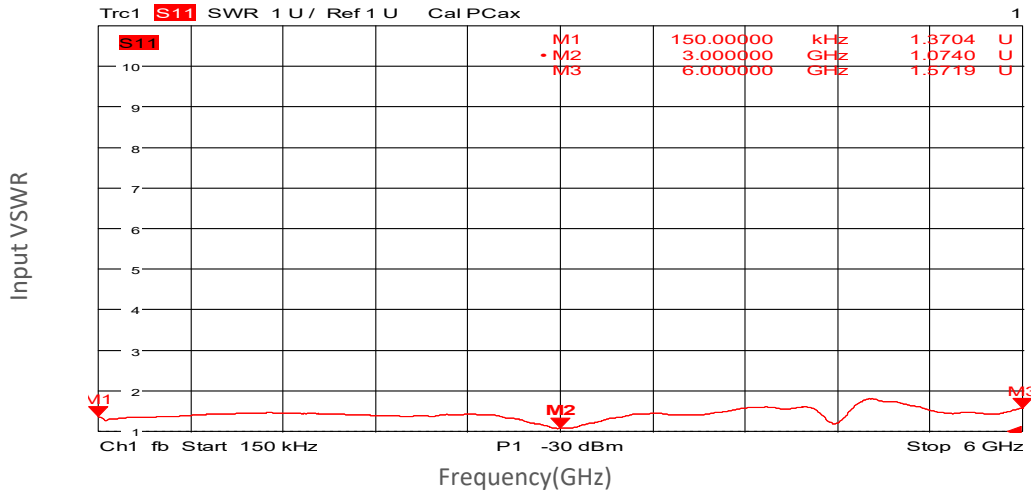
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

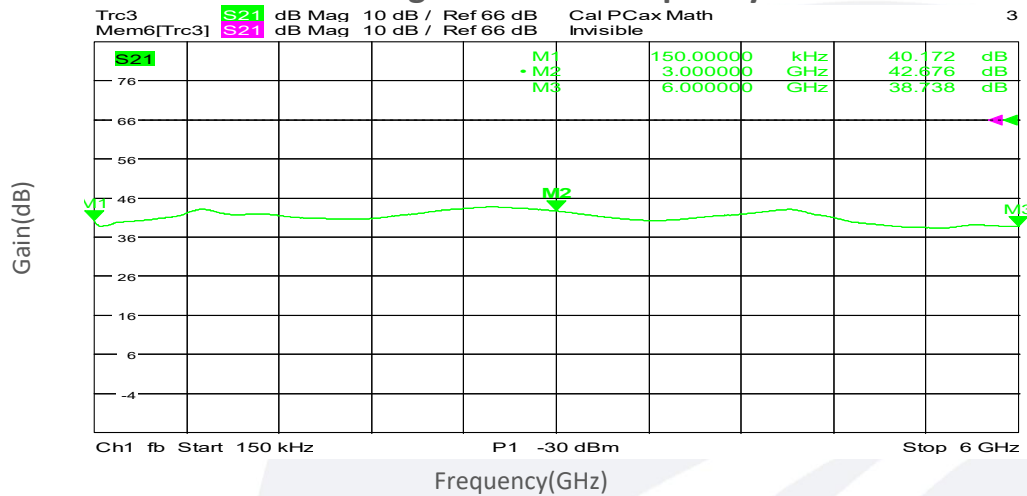
标准型号 Part Number	描述 Description	版本号 Revision
TLPA50K6G-33-33	Power amplifier 50KHz-6GHz, Gain:33dB, Psat:33dBm, +28V DC, Without Heatsink	Rev.1.1
TLPA50K6G-33-33-HS	Power amplifier 50KHz-6GHz, Gain:45dB, Psat:33dBm, +28V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

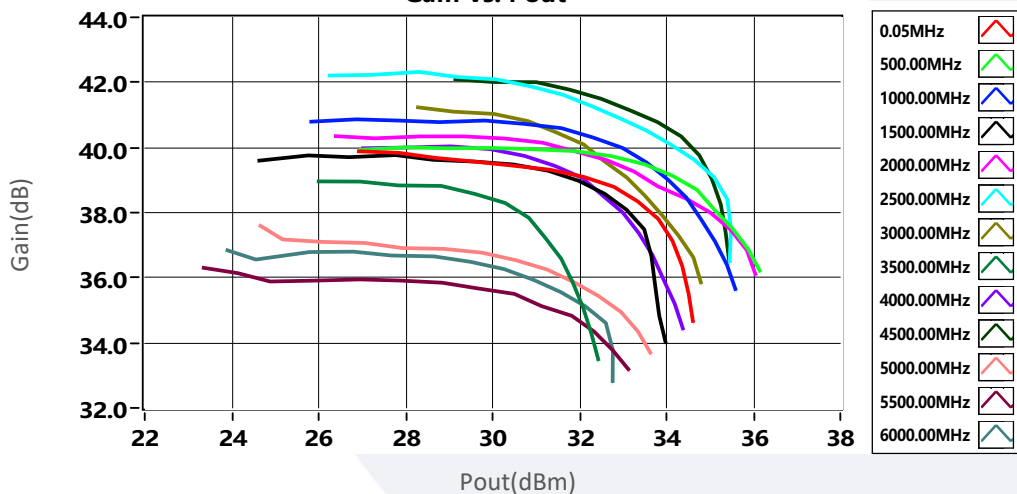
Input VSWR vs Frequency



Small Signal Gain vs Frequency



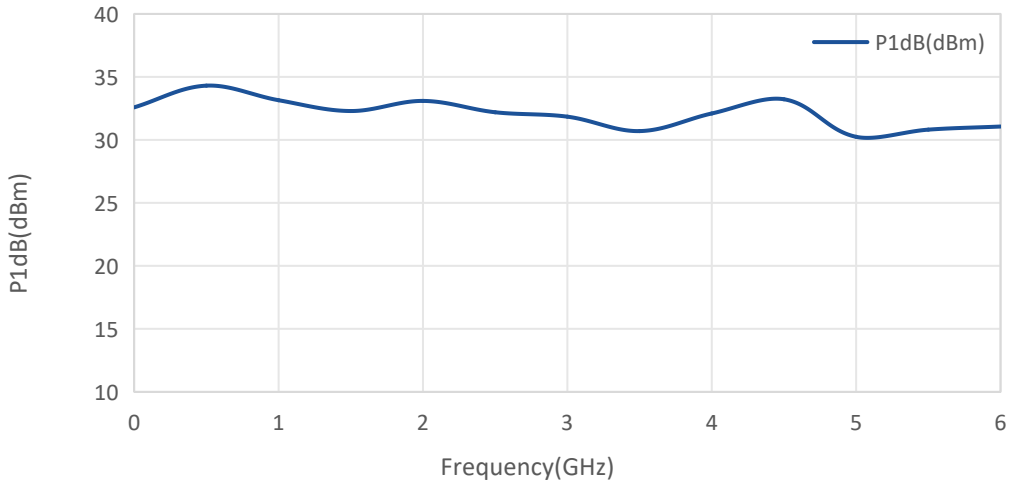
Gain vs Output Power



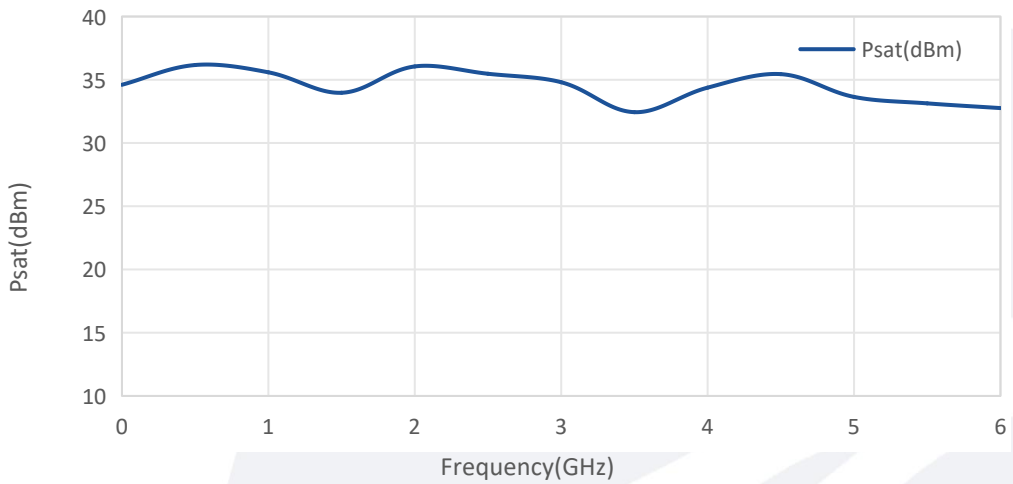
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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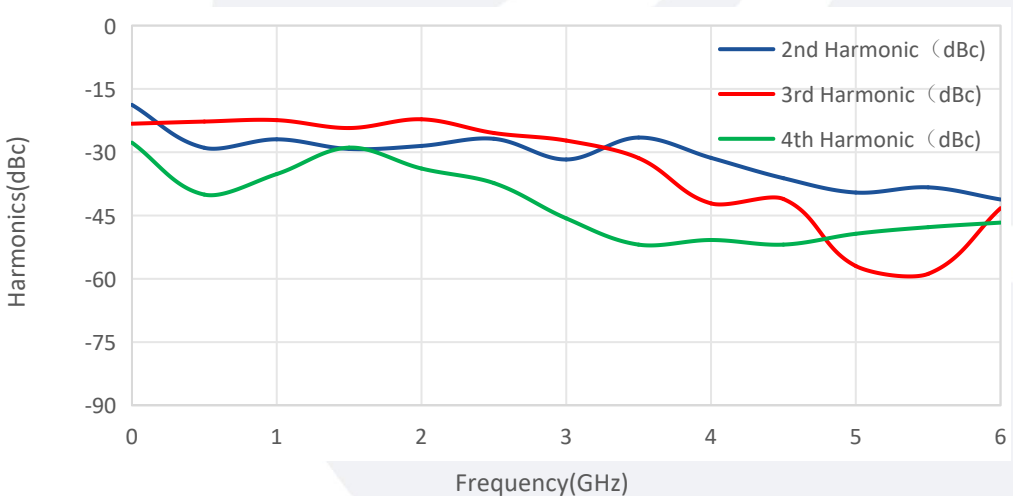
P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency



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