

Model:TLPA1G6G-52-50
Power Amplifier
1-6GHz, Gain:52dB, Psat:50dBm
Feature:

- Ultra Wide Band: 1-6GHz
- Gain:52dB Typ
- Psat Output Power:50dBm 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	1-6			GHz
小信号增益 Small Signal Gain	50	52		dB
增益平坦度 Gain Flatness		±3	±5	dB
饱和输出功率 Output Psat	50	51		dBm
谐波 Harmonics		-12		dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		+36		V DC
直流电流 DC Supply Current		3	22	A
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/N Female	
直流偏置 DC Bias	DB15	
尺寸 Size	270*160*27	mm
重量 Weight	250	g

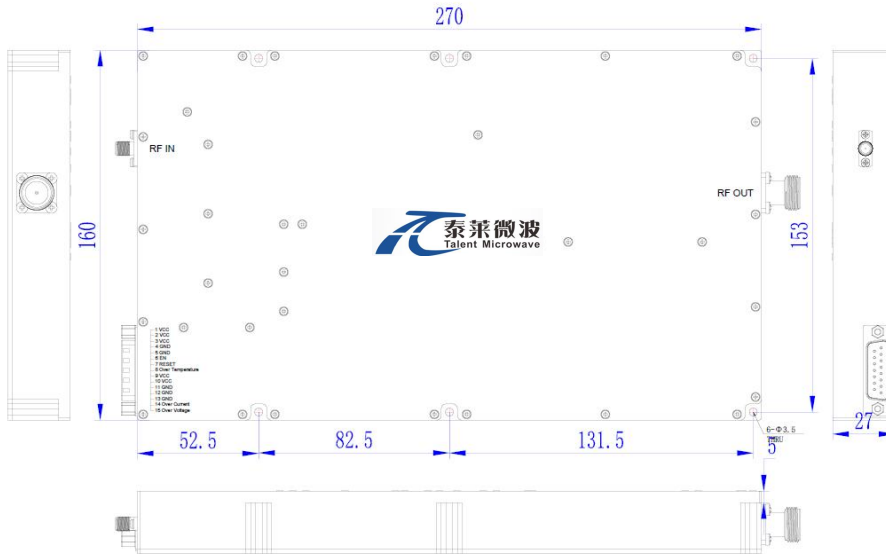
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+38V
输入功率 RF Input Power	5dBm
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



温度环境 Environmental Conditions:

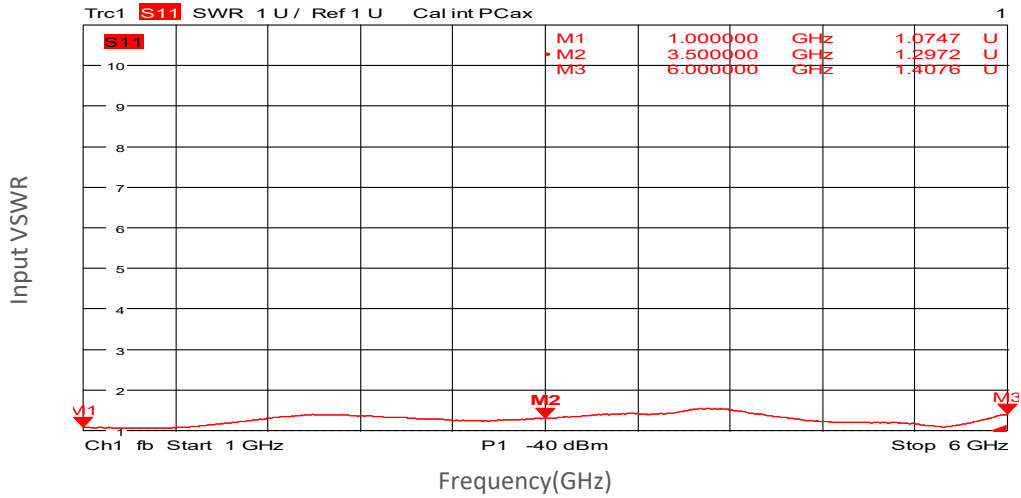
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

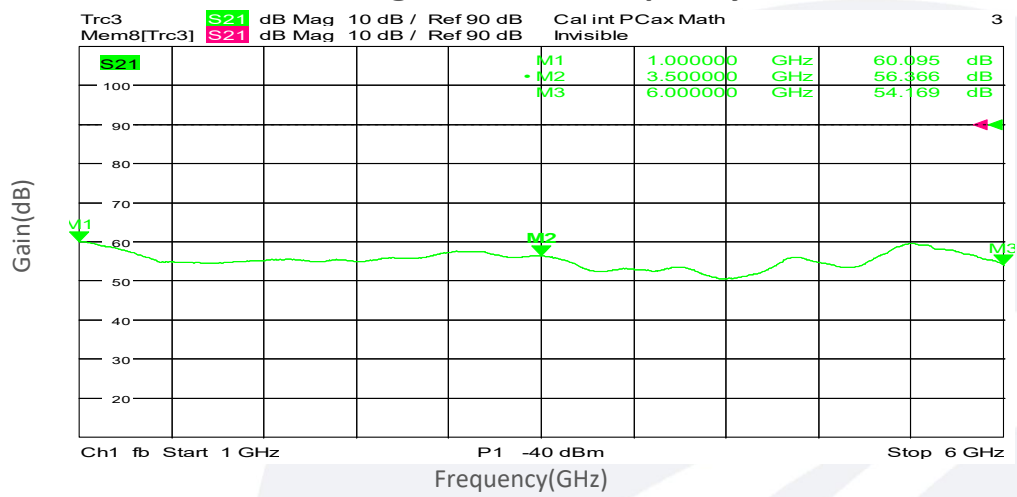
标准型号 Part Number	描述 Description	版本号Revision
TLPA1G6G-52-50	Power amplifier 1-6GHz,Gain:52dB,Psat:50dBm,+36V DC,Without Heatsink.	Rev.1.1
TLPA1G6G-52-50-HS	Power amplifier 1-6GHz,Gain:52dB,Psat:50dBm,+36V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

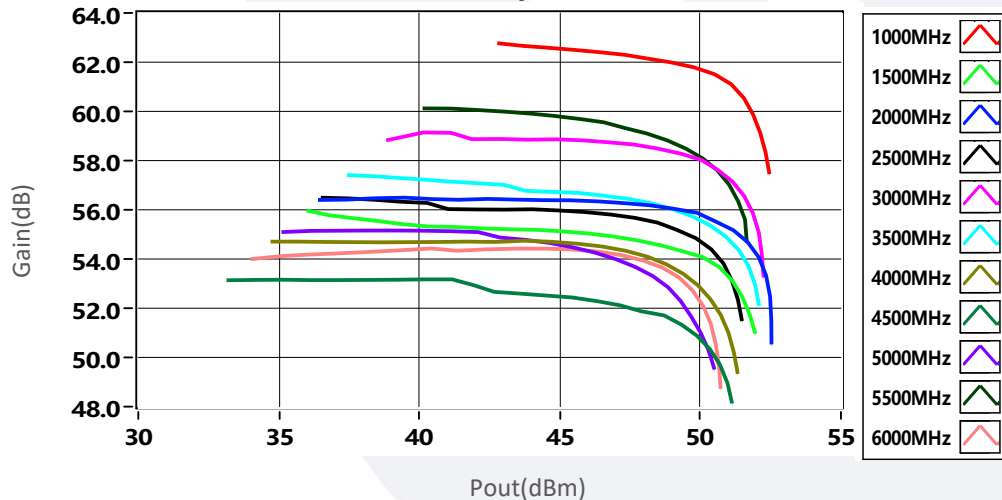
Input VSWR vs Frequency



Small Signal Gain vs Frequency



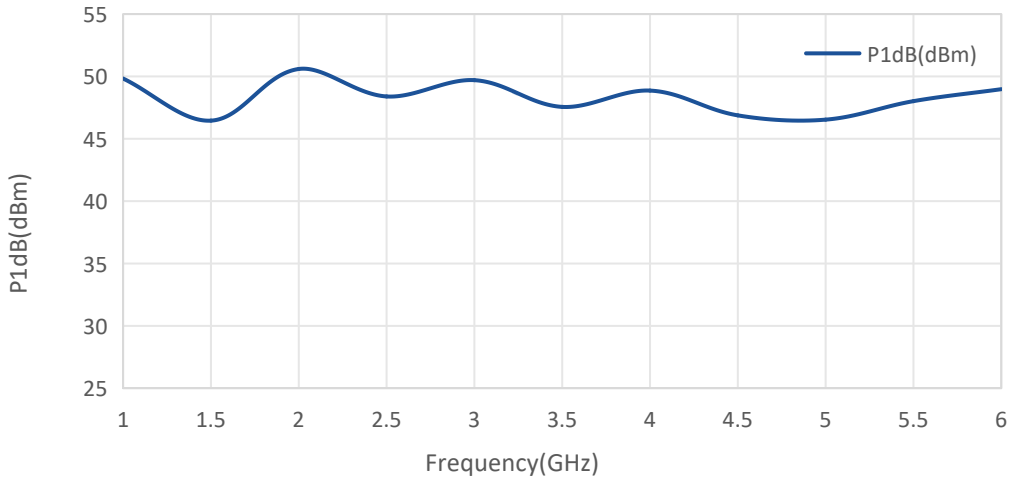
Gain vs Output Power



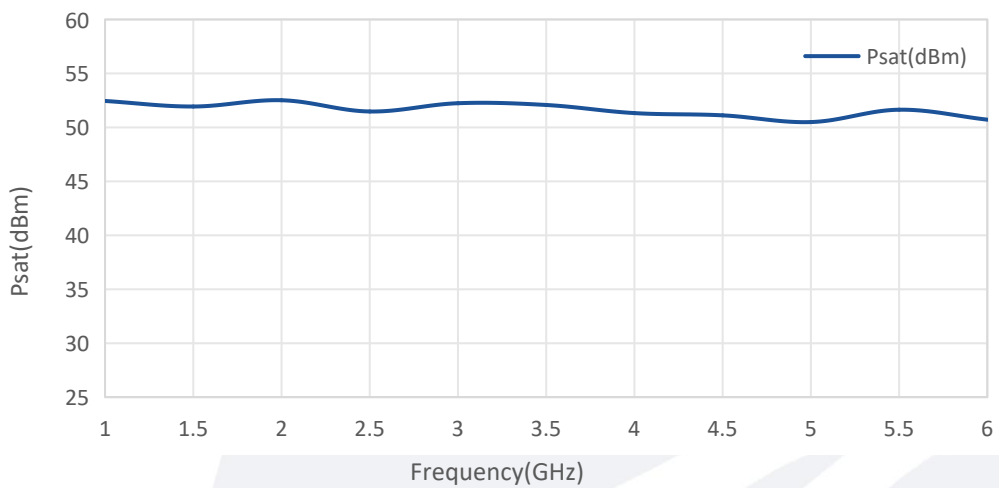
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

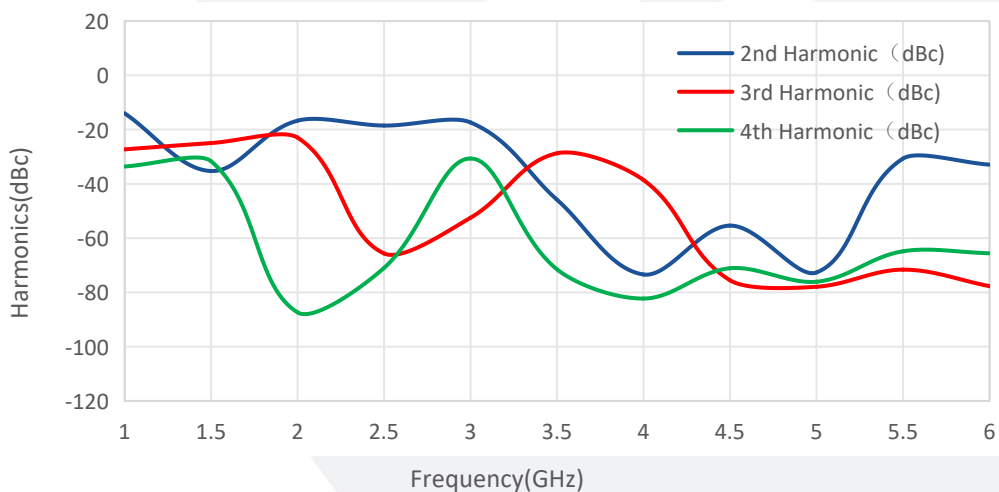
P1dB vs Frequency



Psat vs Frequency



Harmonics 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.