

**Model:TLPA1G6G-45-45-BC**
**Solid State High Power Amplifier Systems  
 1-6GHz,Gain:45dB,Psat:45 dBm,220V AC**
**Feature:**

- Wide Band: 1-6GHz
- Gain: 45dB Min
- Psat Output Power:45dBm Min
- Good Power and Gain Flatness.
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

参数Parameter	代码 Symbo	Min	Typ	Max	单位Units
频率范围 Frequency range	BW	1-6			GHz
增益 Gain	GP	45	47		dB
增益平坦度 Gain flatness	$\Delta$ GL		$\pm$ 4	$\pm$ 5	dB
线性输出功率 Output P1dB	P1dB		42		dBm
饱和输出功率 Output Psat	Psat	45	46		dBm
杂散 Spurious@Pout=54dBm	Spur			-60	dBc
谐波 Harmonics@Pout=54dBm	HAM			-10	dBc
输入驻波 Input VSWR	VSWRin		1.5	2.0	:1
交流电压 AC Voltage	Vac	110	220		V AC
交流电流 AC Supply Current	Iac	2A@220V AC			A
阻抗 Impedance	I/O-IMP	50			Ohms

**机械特性 Mechanical Specifications:**

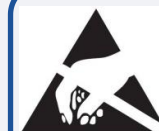
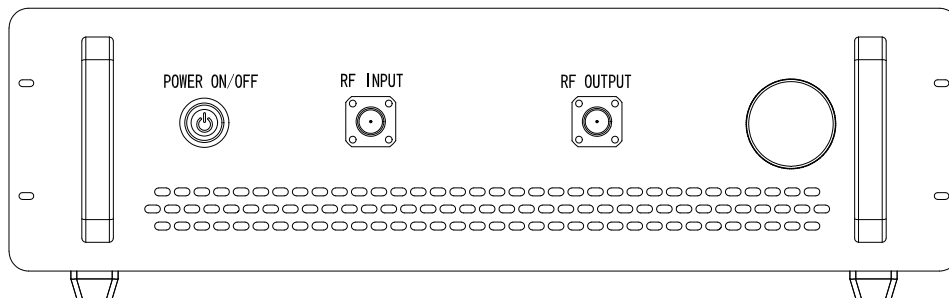
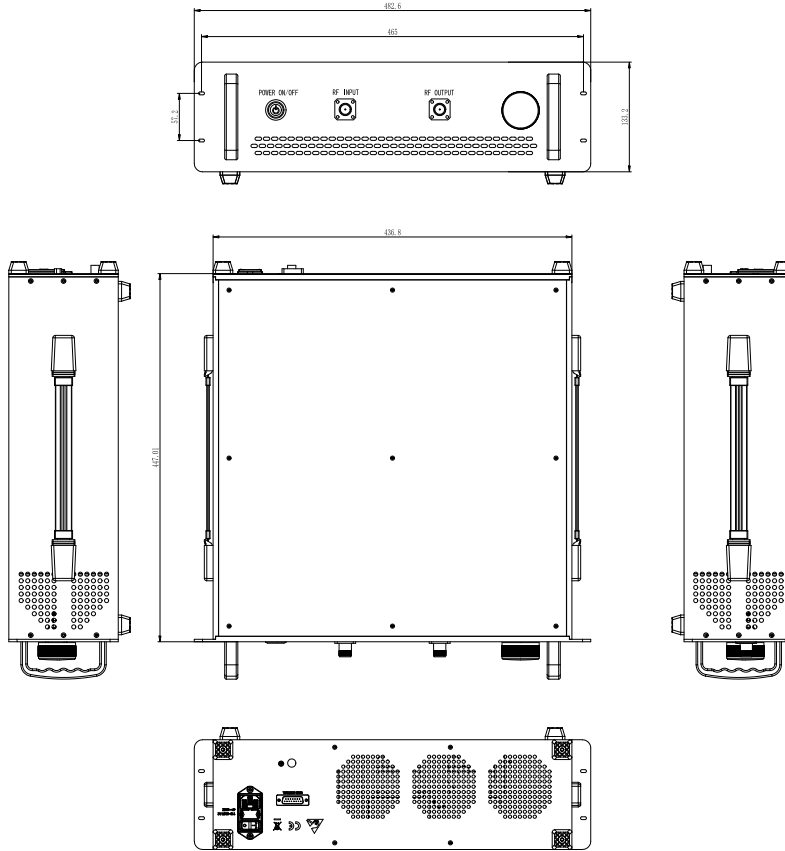
参数 Parameter	指标 Value	单位Units
输入/输出接口 Input /Output Connector	N Female/N Female	
尺寸 Size	3U*500 depth	mm
重量 Weight	27	Kg

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
输入功率 RF Input Power	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



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*	-20		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10000			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			

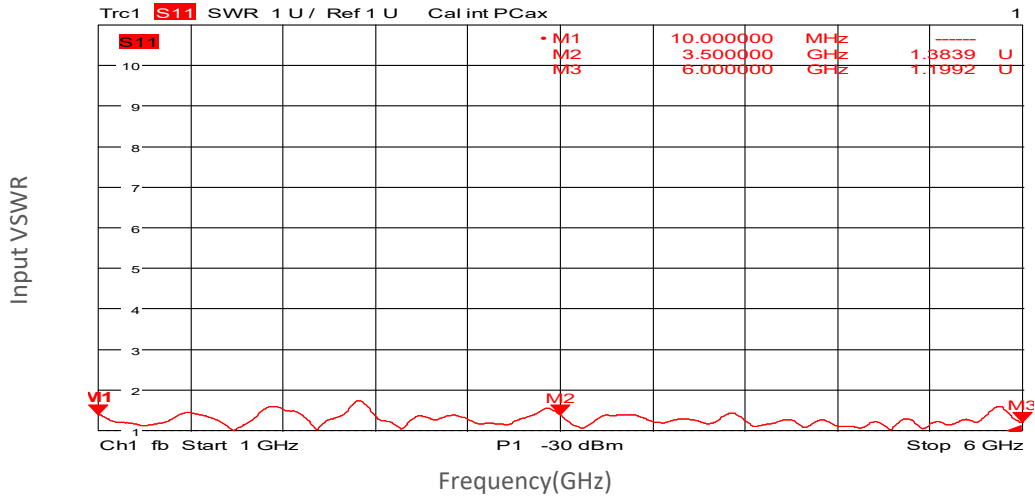
\*Note: For a wider temperature range, please consult the manufacturer.

**订货信息 Ordering Information:**

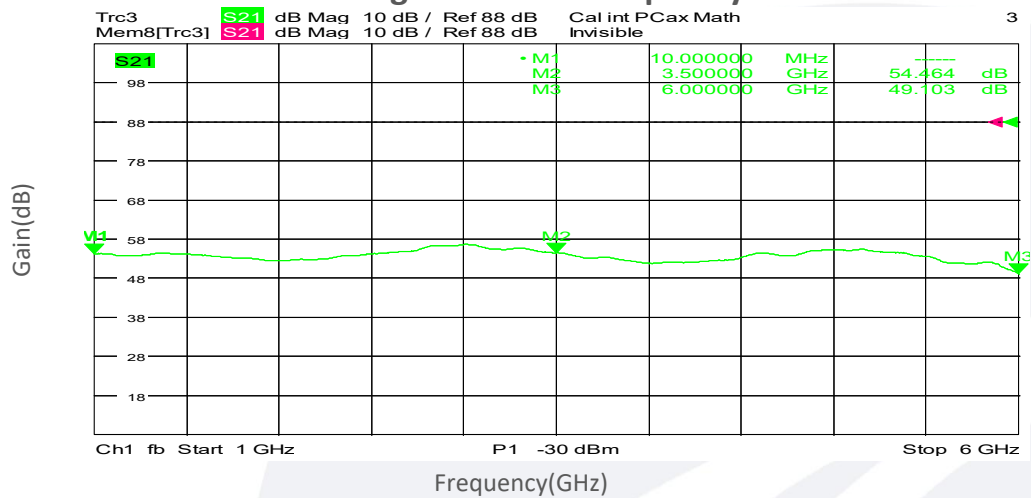
标准型号 Part Number	描述 Description	版本号 Revision
TLPA1G6G-45-45-BC	Solid State High Power Amplifier Systems 1-6GHz, Gain:45dB, Psat:45 dBm, 220V AC, Built in Fan Cooling	Rev.1.0

典型曲线 Typical Performance Data:

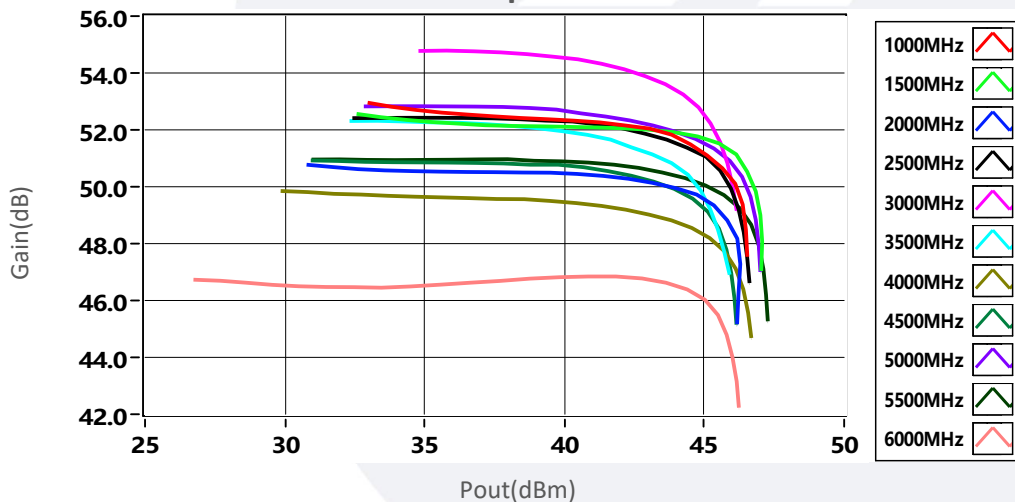
### Input VSWR vs Frequency



### Small Signal Gain vs Frequency



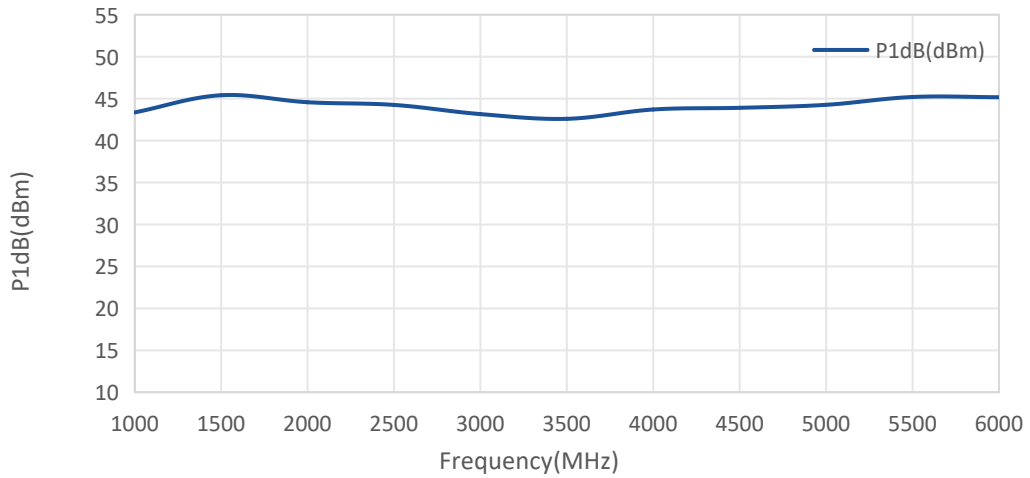
### Gain vs Output Power



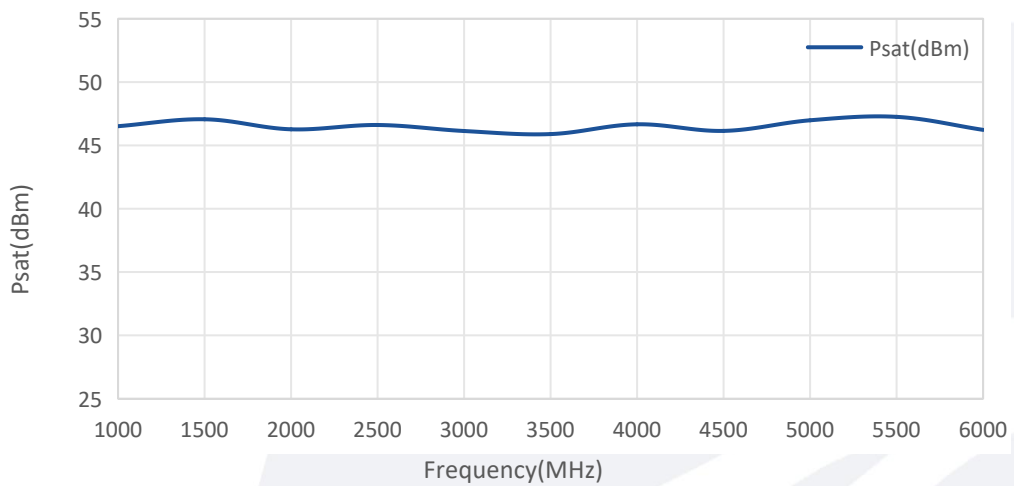
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

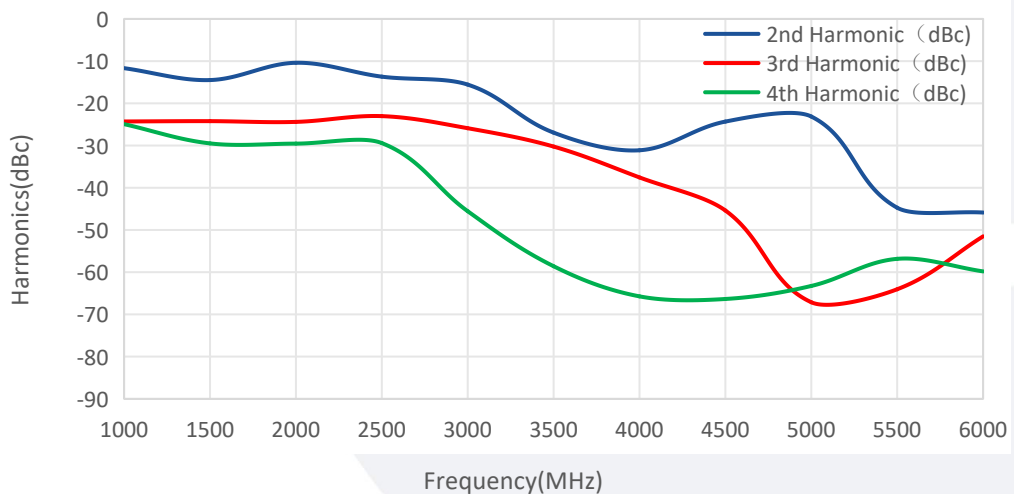
**P1dB vs Frequency**



**Psat vs Frequency**



**Harmonics vs Frequency**



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