

**Model:TLPA0.5G6G-50-50-BC**
**Solid State High Power Amplifier Systems 0.5-6GHz, Gain:50dB, Psat:50dBm**
**Feature:**

- Ultra Wide Band: 0.5-6GHz
- Gain: 50dB Min
- Psat Output Power: 50dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection.
- 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	0.5-6			GHz
小信号增益 Small Signal Gain	SSGP	50			dB
增益调节范围 Gain adjustable range	$\Delta$ GR	20			dB
增益调节步进 Gain adjustable Step	$\Delta$ GS		0.5		dB
增益平坦度 Gain flatness	$\Delta$ GL		$\pm$ 3.5		dB
饱和输出功率 Output Psat	Psat	50			dBm
杂散 Spurious@Pout=50dBm	Spur			-60	dBc
谐波 Harmonics@Pout=50dBm	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
阻抗 Impedance	I/O-IMP	50			Ohms

**机械特性 Mechanical Specifications:**

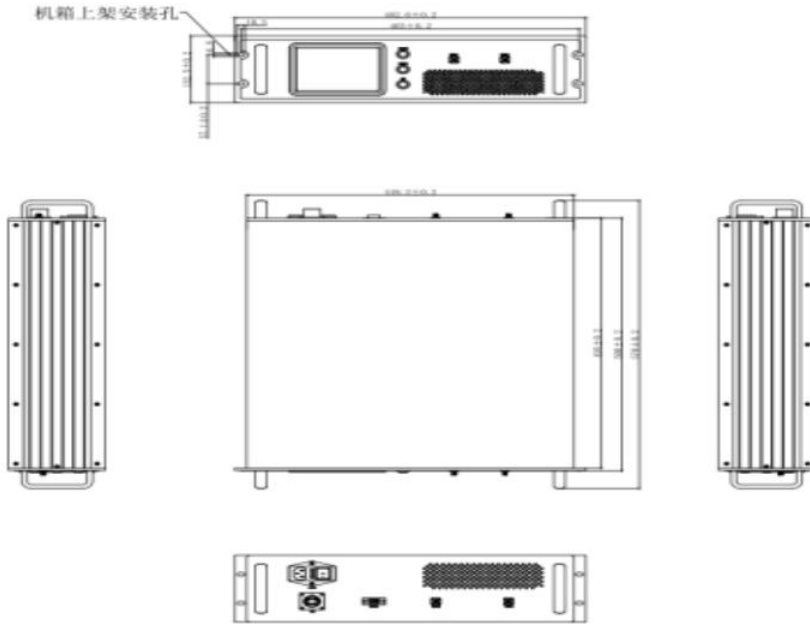
参数 Parameter	指标 Value	单位Units
输入/输出接口 Input /Output Connector	N Female/N Female	
AC加电控制 AC Power Interface	Air switch	
尺寸 Size	19 Inch 4U	
重量 Weight	30	Kg

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	260V AC
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



主要功能 Key Features:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

参数 Parameter	特点 Advantages
控制和监控 Remote Control	Ethernet RJ-45 TCP/IP
控制功能 Control functions	1, Power setting On/Off 2, ALC automatic level control
内置保护功能 Protection functions	1, Over TEM 2, Over voltage 3, Over current protection 4, Over VSWR
监控功能 Monitoring functions	1, Forward Power 2, Temp Fault
冷却系统 Cooling system	Built in Cooling system, forced air cooling

### 温度环境 Environmental Conditions:

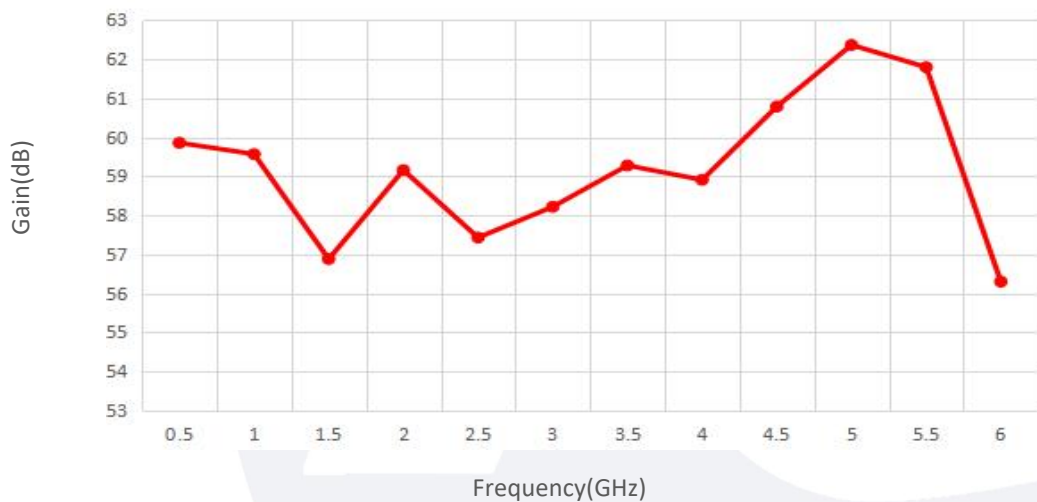
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-20		+50	°C
存储温度 Non-operating Temperature	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50000			feet
震动 Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TLPA0.5G6G-50-50-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:50dB,Psat:50dBm,220V AC,Built in Fan Cooling	Rev.1.0

### 典型曲线 Typical Performance Data:

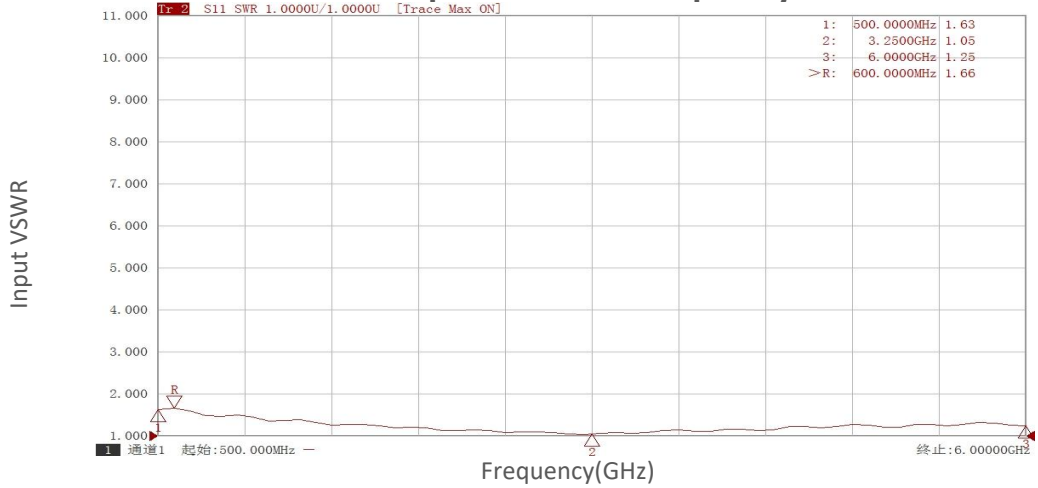
Small Signal Gain vs Frequency



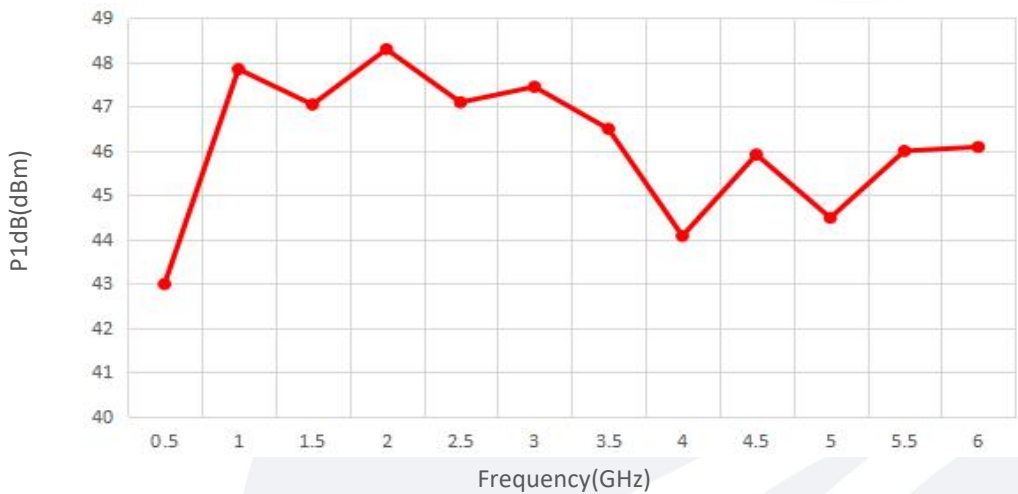
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

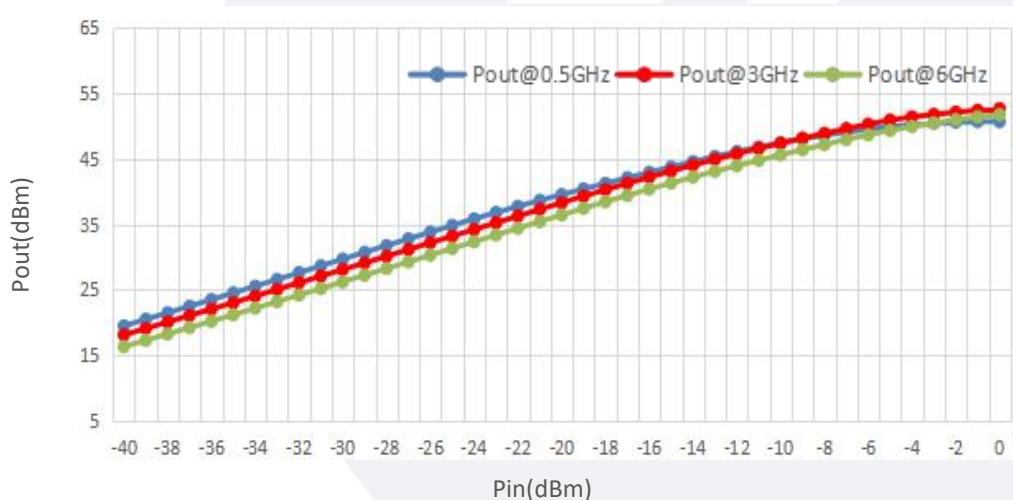
Input VSWR vs Frequency



P1dB vs Frequency



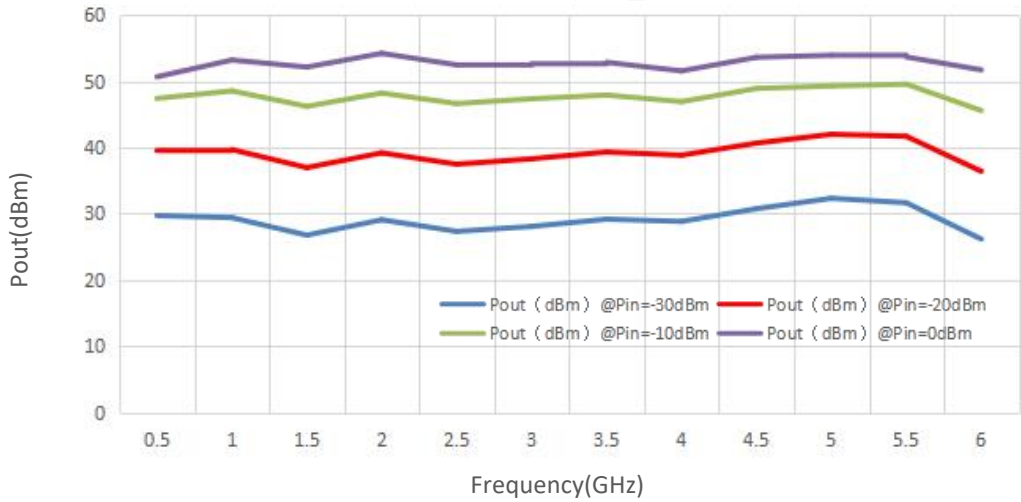
Pout@Pin



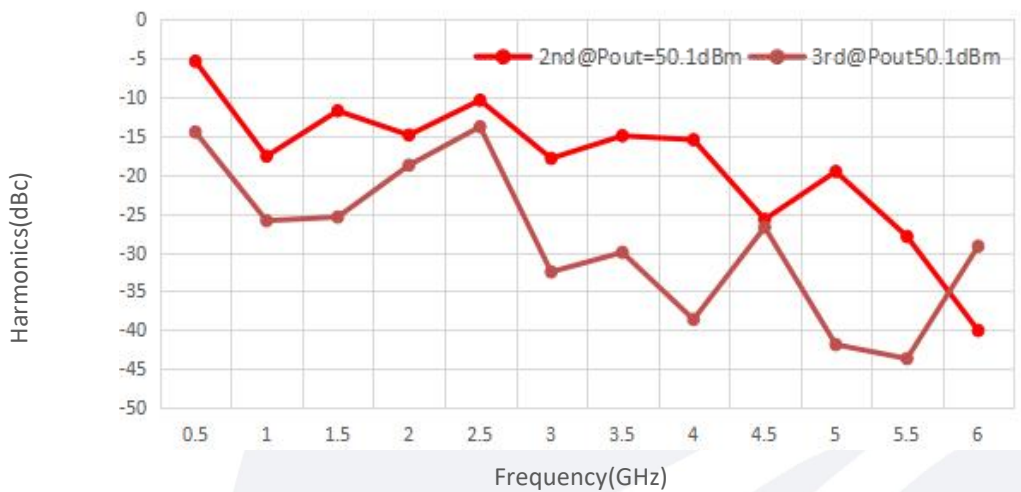
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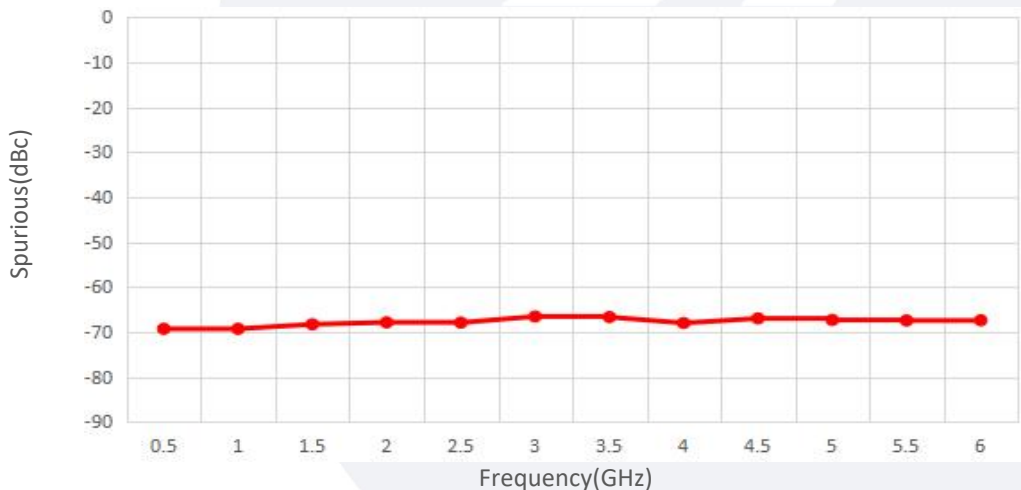
Pout@Equal\_Pin



Harmonics vs Frequency



Spurious vs Frequency



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