

Model: TLPA0.5G6G-50-47-BC
**Solid State High Power Amplifier Systems
 0.5-6GHz, Gain: 50dB, Psat: 47 dBm, 220V AC**
Feature:

- Wide Band: 0.5-6GHz
- Gain: 50dB Min
- Psat Output Power: 47dBm 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 Sympo	Min	Typ	Max	单位 Units
频率范围 Frequency range	BW	0.5-6			GHz
增益 Gain	GP	50			dB
增益平坦度 Gain flatness	Δ GL		± 3.5		dB
饱和输出功率 Output Psat	Psat	47			dBm
增益可调范围 Gain adjust range	Δ GR	20			dB
增益可调步进 Gain adjust step	Δ GS		0.5		dB
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM		-10		dBc
输入驻波 Input VSWR	VSWRin			2.0	:1
交流电压 AC Voltage	Vac	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	
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:



参数 Parameter	特点 Advantages
控制和监控 Remote Control	Ethernet RJ-45 TCP/IP
监控功能 Monitoring functions	1, Forward Power 2, Temp Fault
内置保护功能 Protection functions	1, Over TEM 2, Over voltage 3, Over current protection 4, Over VSWR
控制功能 Control functions	1, Gain/power setting with 31.5dB range 2, ALC On/Off
冷却系统 Cooling system	Built in Cooling system, forced air cooling

温度环境 Environmental Conditions:

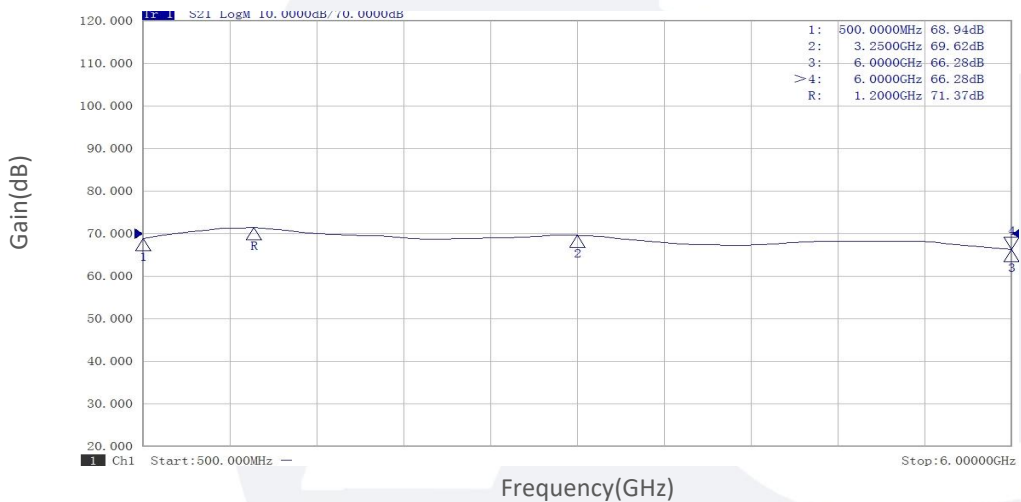
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-20		+50	°C
存储温度 Non-operating Temperature	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50000			feet
震动 Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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-50-47-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:50dB,Psat:47 dBm,220V AC,Built in Fan Cooling	Rev.1.0

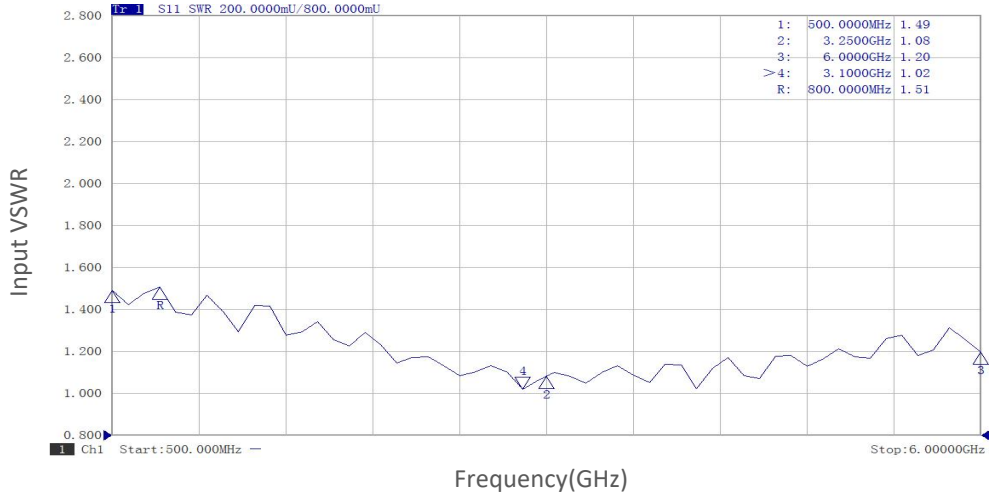
典型曲线 Typical Performance Data:

Gain vs Frequency

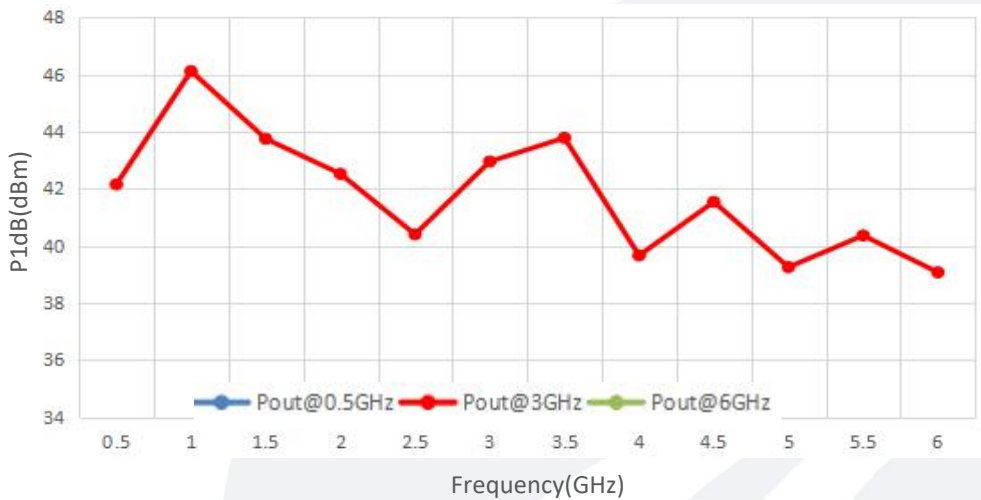


典型曲线 Typical Performance Data:

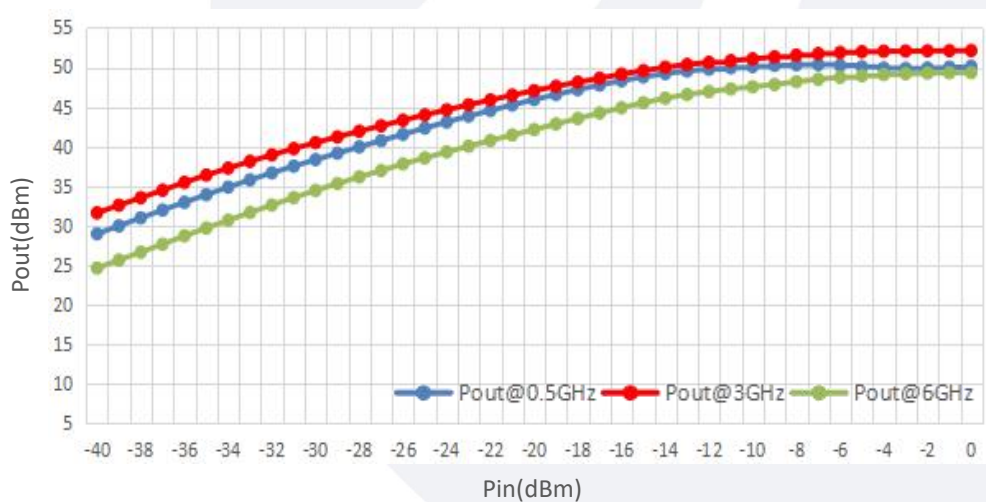
Input VSWR vs Frequency



P1dB vs Frequency

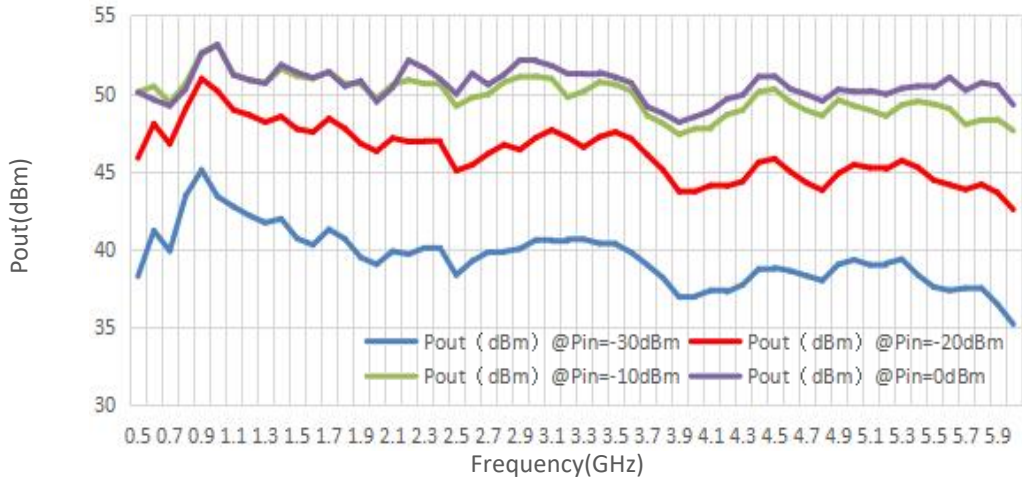


Pout@Pin

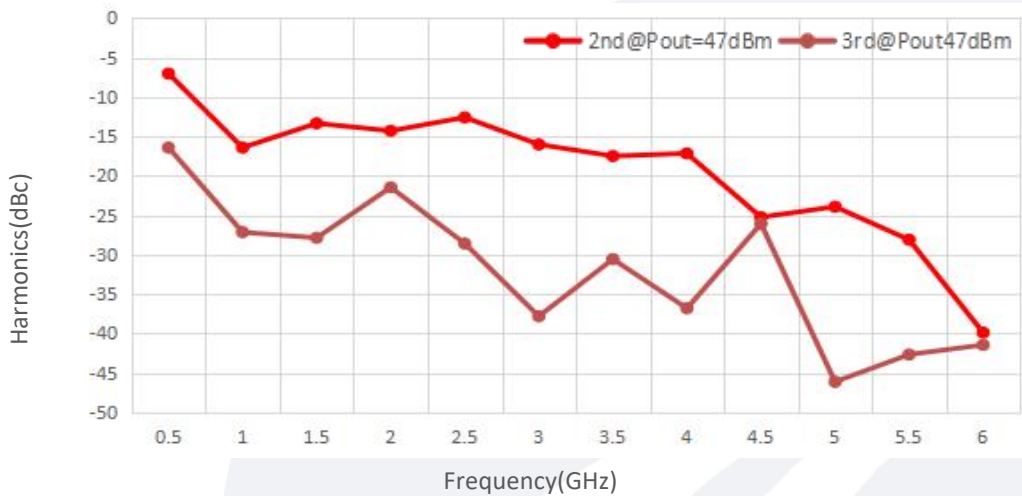


典型曲线 Typical Performance Data:

Pout@Equal_Pin



Harmonics vs Frequency



Spurious vs Frequency

