

## Model:TLPA300K500K-50-49-BC

## Solid State High Power Amplifier Systems 0.3-0.5MHz,Gain:50dB,Psat:49 dBm

### Feature:

- Ultra Wide Band: 0.3-0.5MHz
- Gain: 50dB Min
- Psat Output Power: 49dBm
- 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	0.3-0.5			MHz
增益 Gain	GP	50	52		dB
增益平坦度 Gain flatness	$\Delta$ GL		$\pm 0.5$	$\pm 1$	dB
线性输出功率 Output P1dB	P1dB	47	48		dBm
饱和输出功率 Output Psat	Psat	49	50		dBm
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM		-15		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	3A@220V AC			A AC
阻抗 Impedance	I/O-IMP	50			Ohms

### 机械特性 Mechanical Specifications:

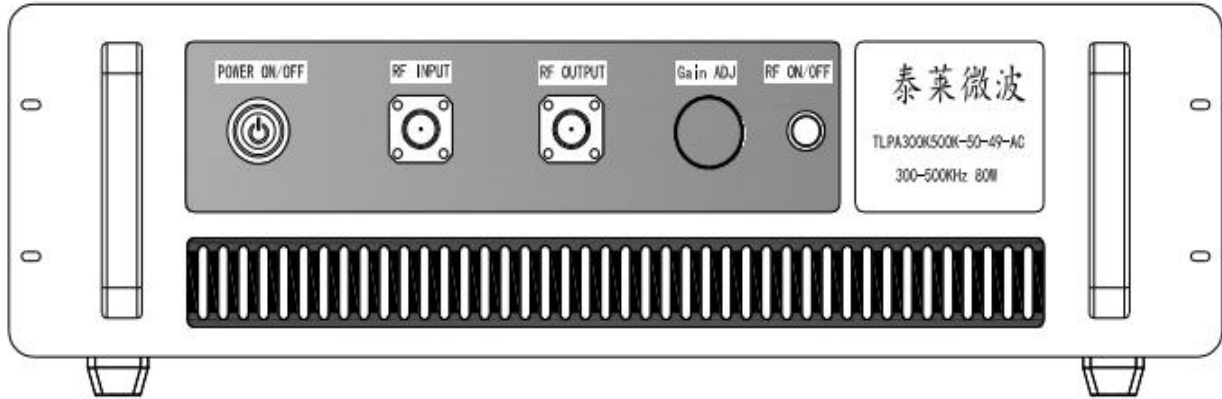
参数 Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	N Female/N Female	
网口通信 Network port Communication	DB15(TTL)	
尺寸 Size	3U*500 depth	mm
重量 Weight	10	Kg

### 绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
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
通信功能 Communication functions	RS422/Ethernet
冷却系统 Cooling system	Built in Cooling system, forced air cooling

**温度环境 Environmental Conditions:**

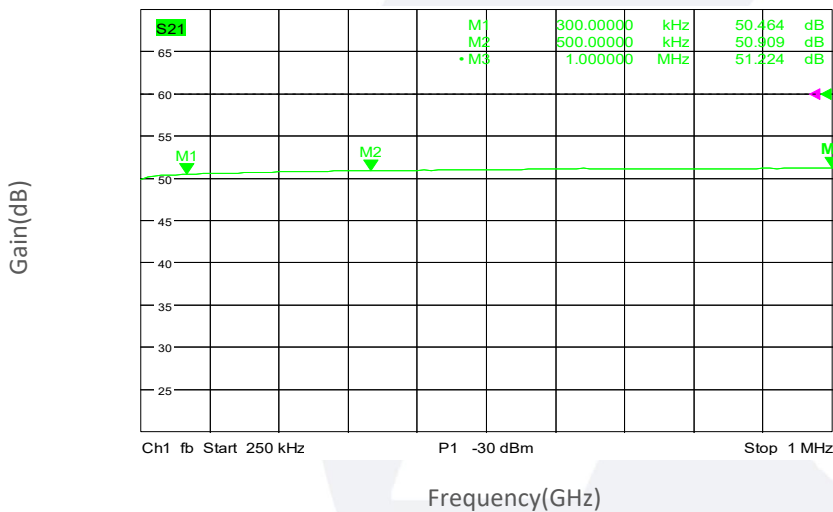
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+50	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30000			feet
震动 Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc 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
TLPA300K500K-50-49-BC	Solid State High Power Amplifier Systems 0.3-0.5MHz,Gain:50dB,Psat:49dBm,220V AC,Built in Fan Cooling	Rev.1.0

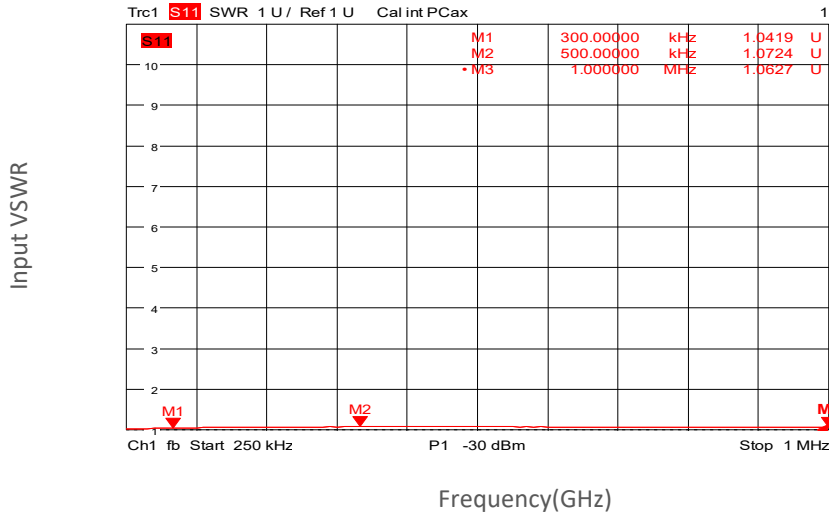
**典型曲线 Typical Performance Data:**

**Gain vs Frequency**

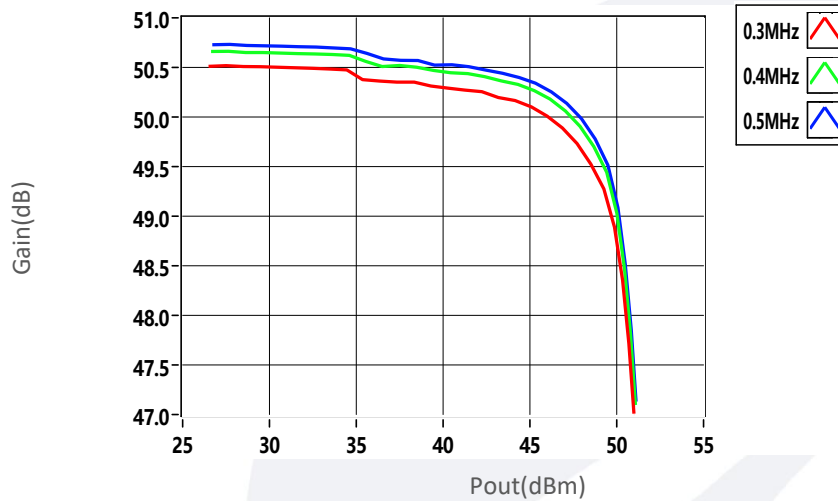


典型曲线 Typical Performance Data:

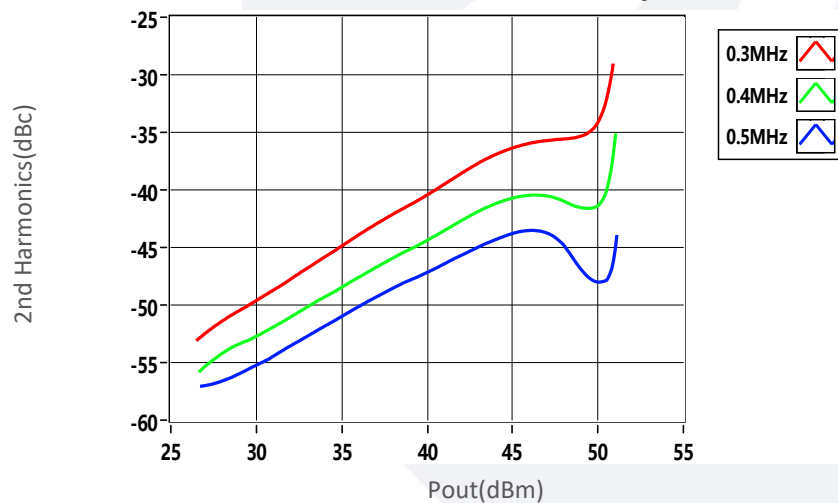
Input VSWR vs Frequency



Gain vs Output Power



2nd Harmonics VS Output Power



典型曲线 Typical Performance Data:

3rd Harmonics VS Output Power



Output Power vs Frequency

