

**Model: TLPA0.1M200M-47-47-BC**
**Solid State High Power Amplifier Systems  
 0.1-200MHz, Gain: 47dB, Psat: 47dBm**
**Feature:**

- Ultra Wide Band: 0.1-200MHz
- Gain: 47dB Min
- Psat Output Power: 47 dBm 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	0.1-200			MHz
增益 Gain	GP	47	50		dB
增益平坦度 Gain flatness	$\Delta$ GL		$\pm 2$	$\pm 3$	dB
线性输出功率 Output P1dB	P1dB		43		dB
饱和输出功率 Output Psat	Psat	47	48		dBm
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM			-10	dBc
增益可调范围 Gain Adjust Range	$\Delta$ GR		30		dB
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	1.5A@220V AC			A
阻抗 Impedance	I/O-IMP	50			Ohms

**机械特性 Mechanical Specifications:**

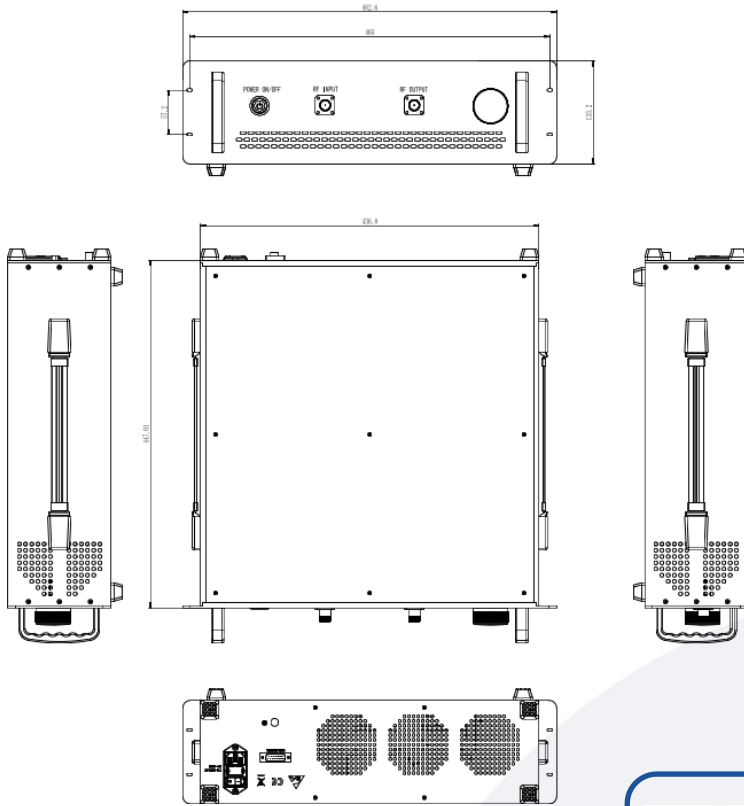
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	N Female	
尺寸 Size	3U*500 depth	mm
重量 Weight	15	kg

**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



主要功能 Key Features:



参数 Parameter	特点 Advantages
控制功能 Control functions	1, Power setting On/Off
内置保护功能 Protection functions	1, Over TEM 2, Over voltage 3, Over current protection 4, Over VSWR
冷却系统 Cooling system	Built in Cooling system, forced air cooling

### 温度环境 Environmental Conditions:

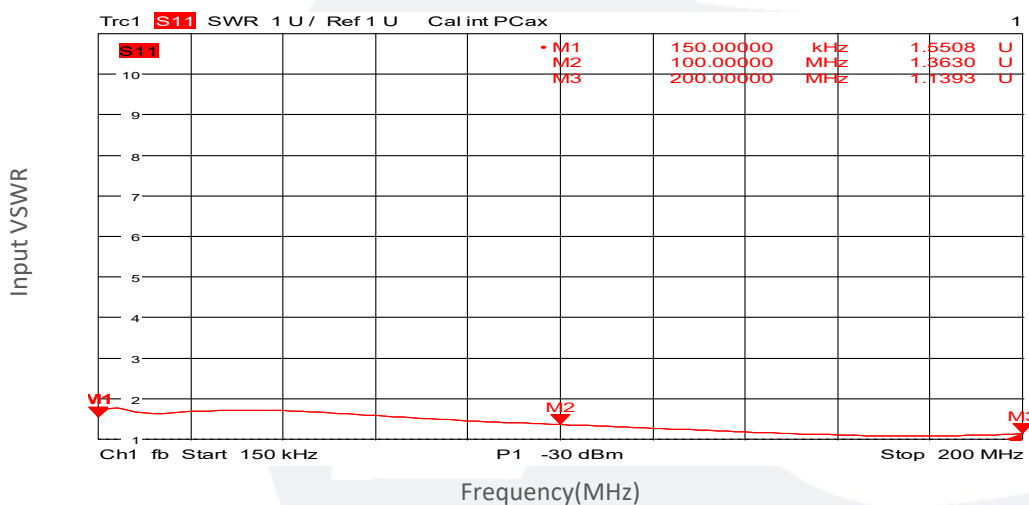
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-20		+50	°C
存储温度 Non-operating Temperature	-40		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	15000			feet
震动 Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half 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
TLPA0.1M200M-47-47-BC	Solid State High Power Amplifier Systems 0.1-200MHz,Gain:47dB,Psat:47 dBm,220V AC,Built in Fan Cooling	Rev.1.0

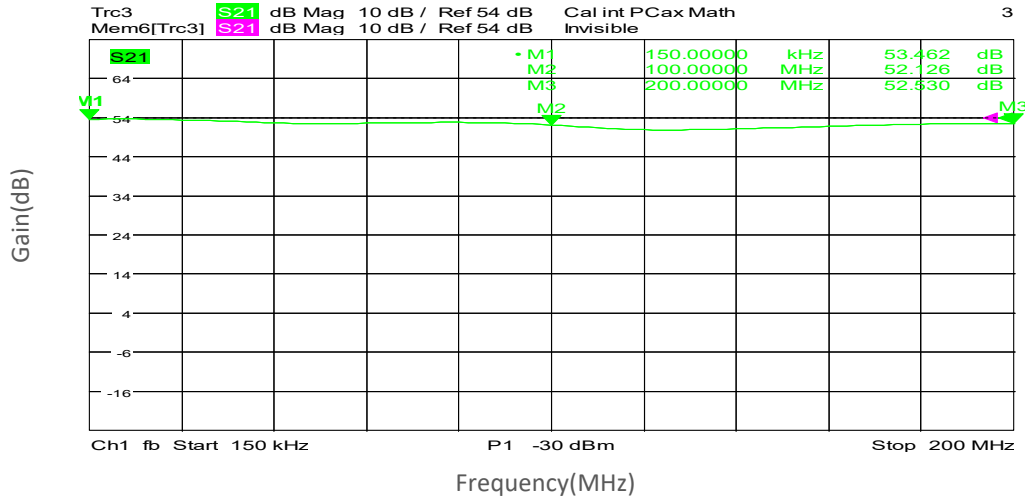
### 典型曲线 Typical Performance Data:

#### Input VSWR vs Frequency

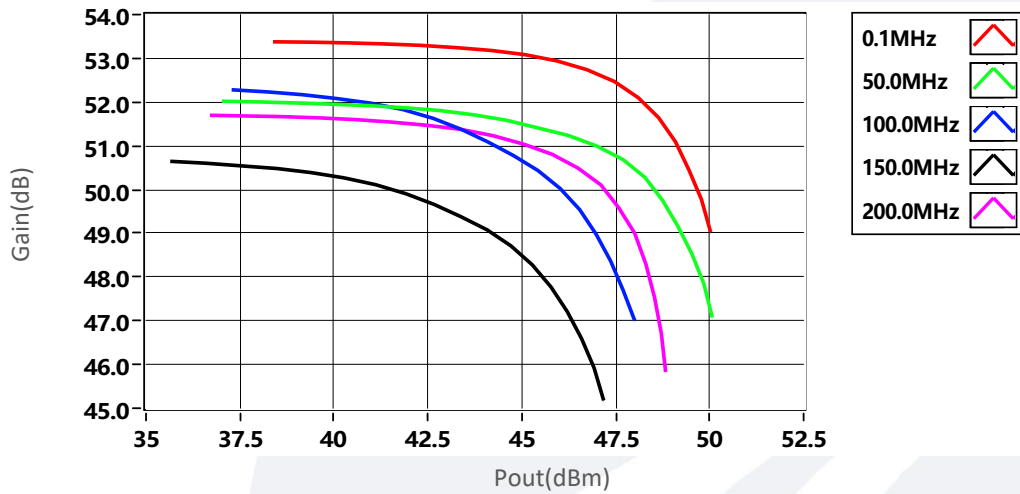


典型曲线 Typical Performance Data:

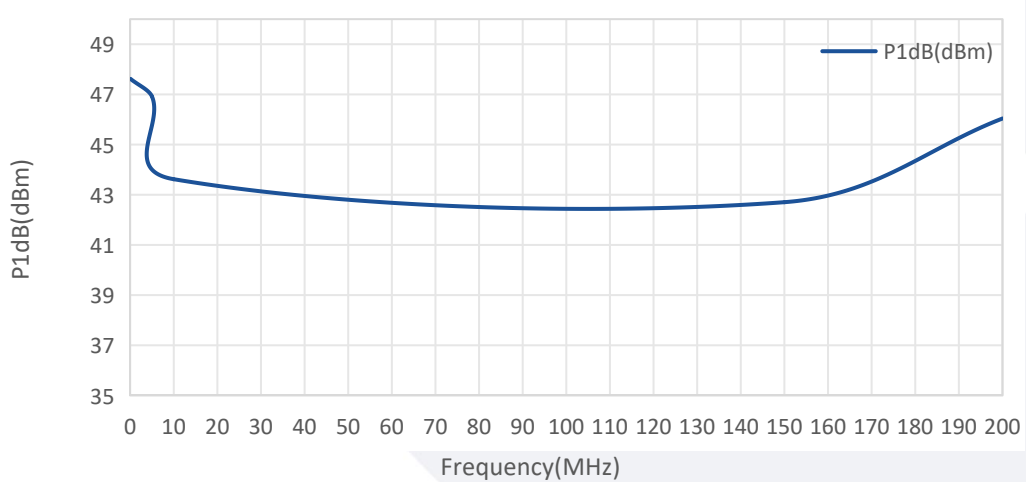
Gain vs Frequency



Gain vs Output Power

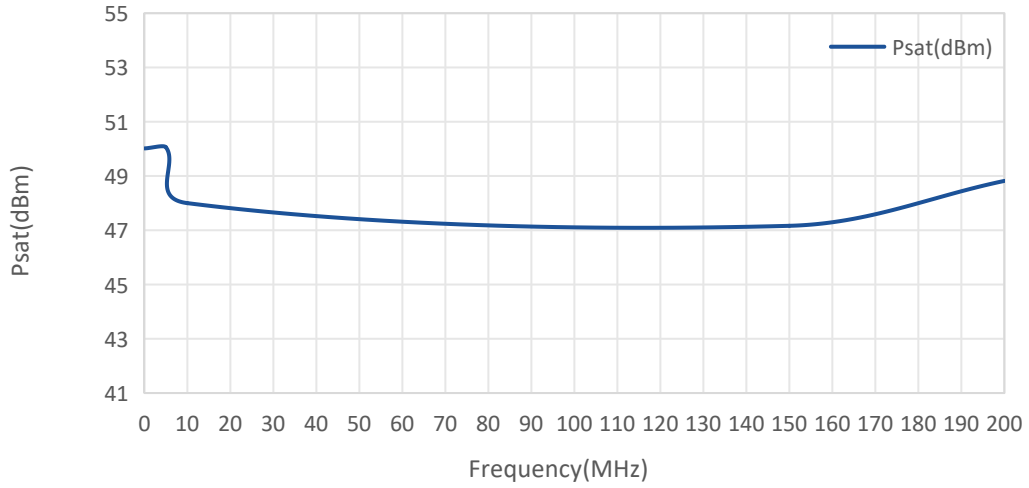


P1dB vs Frequency



典型曲线 Typical Performance Data:

**Psat vs Frequency**



**Harmonics vs Frequency**

