

Model: TPA500M1000M-54-54-BC
**Solid State High Power Amplifier Systems 500
 -1000MHz, Gain: 54dB, Psat: 54dBm, 220V AC**
Feature:

- Ultra Wide Band: 0.5-1GHz
- Gain: 54dB Min
- Psat Output Power: 54dBm
- 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	0.5-1			GHz
增益 Gain	GP	54			dB
增益平坦度 Gain flatness	Δ GL		± 2	± 3	dB
线性输出功率 Output P1dB	P1dB		50		dBm
饱和输出功率 Output Psat	Psat	54			dBm
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	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	5A@220V AC			A AC
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

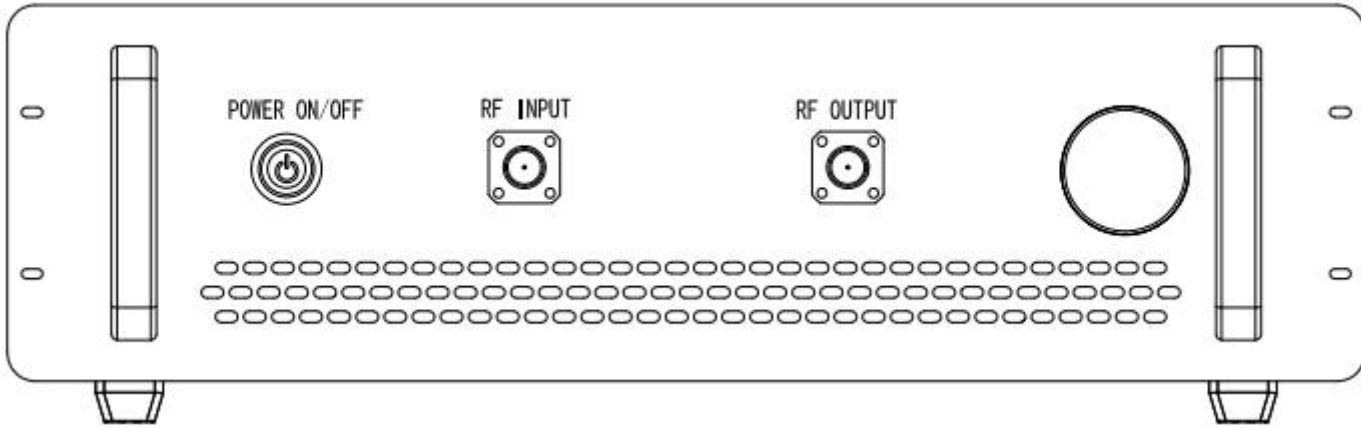
参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	N Female	
尺寸 Size	3U*500 depth	mm
重量 Weight	10	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	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:



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:

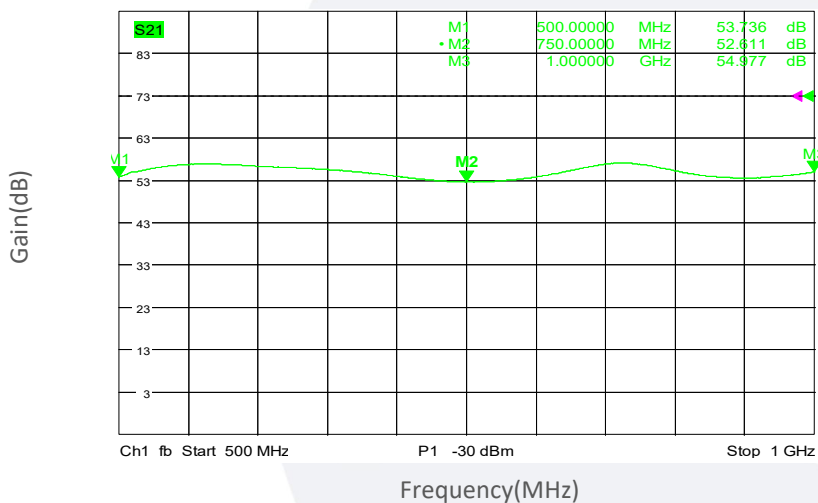
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+50	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30000			feet
震动 Shock / Vibration(MIL-STD- 810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc 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
TLPA500M1000M-54-54-BC	Solid State High Power Amplifier Systems 500-1000MHz, Gain:54dB, Psat:54dBm, 220V AC, Built in Fan Cooling	Rev.1.0

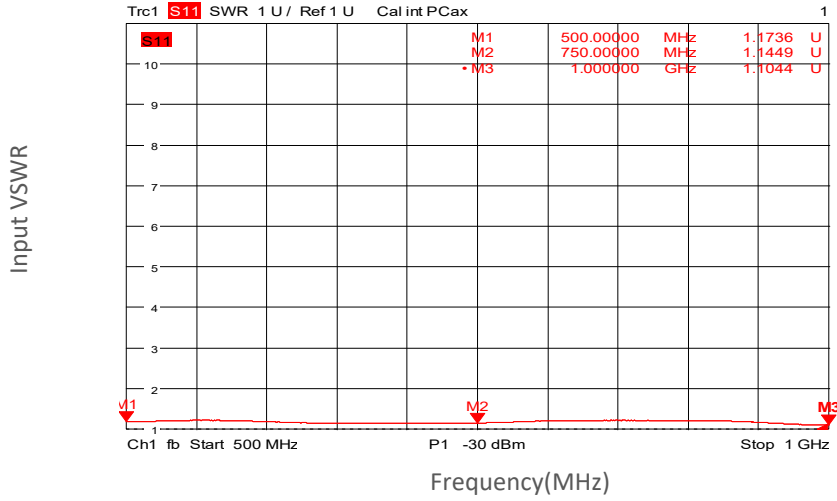
典型曲线 Typical Performance Data:

Gain vs Frequency

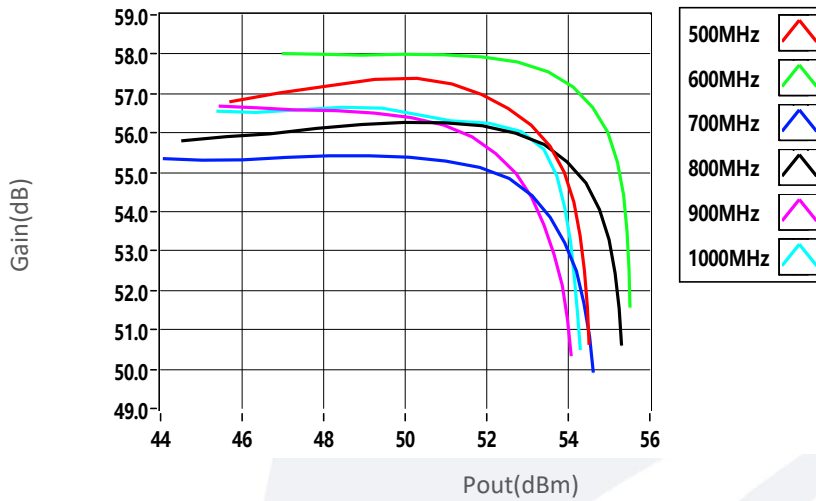


典型曲线 Typical Performance Data:

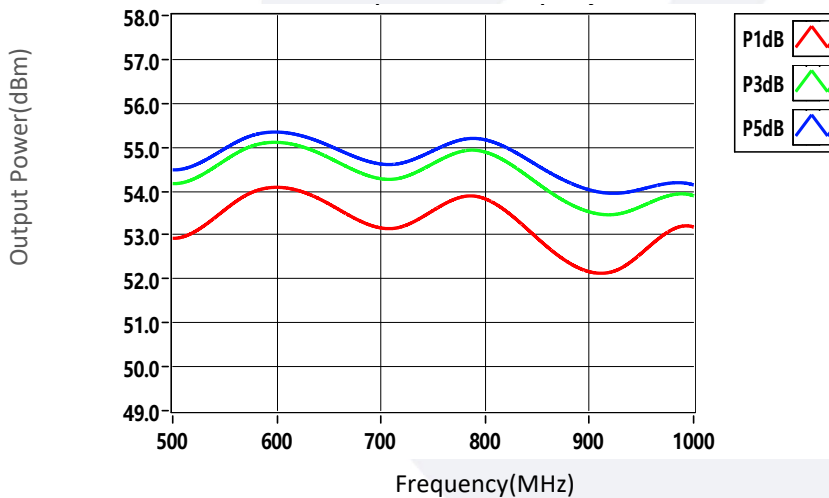
Input VSWR vs Frequency



Gain vs Output Power

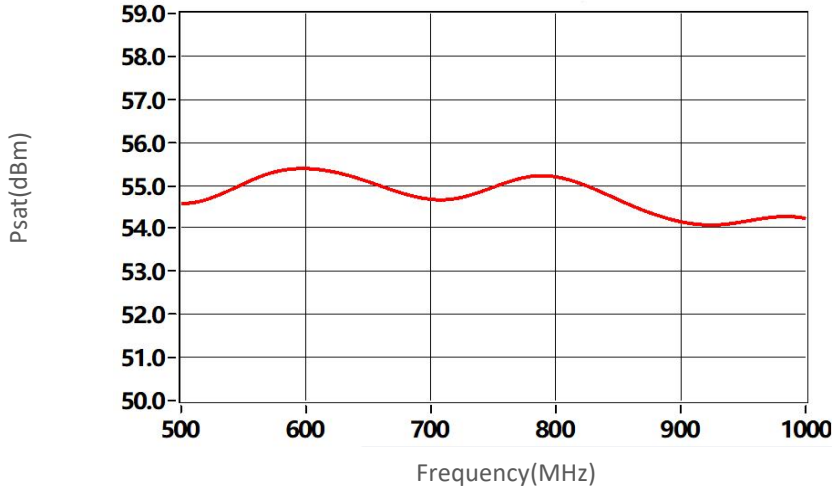


Output Power vs Frequency

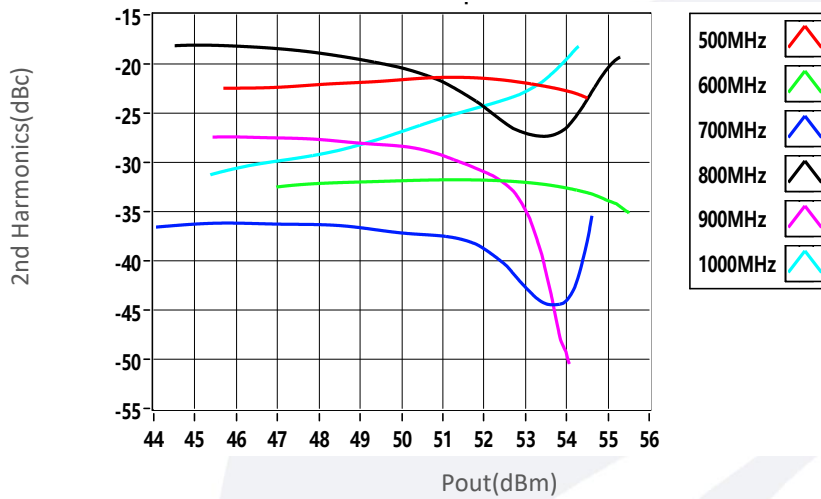


典型曲线 Typical Performance Data:

Psat vs Frequency



2nd Harmonics VS Output Power



3rd Harmonics VS Output Power

