

Solid State High Power Amplifier Systems

10KHz-100MHz /66dB Gain/66dBm Psat/380V AC

Model: TLPA10K100M-66-66-BC

TLPA10K100M-66-66-BC is a solid state high power amplifier systems provides high output power and high gain across the 10KHz to 100MHz frequency range. The amplifier features a built-in 380V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Frequency range: 10KHz-100MHz
- Gain: 66dB Min
- Psat Output Power:66dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR,open/circuit break,overexcitation protection
- 50 Ohm Matched Input / Output

电气特性 Electrical Characteristics:

参数 Parameter	代码 Symbol	Min	Typ	Max	单位 Units
频率范围 Frequency range	BW	10KHz-100MHz			
功率增益 Power Gain	GP	66			dB
增益平坦度 Gain flatness	ΔGL			±2.5	dB
饱和输出功率 Output Psat	Psat	3500			W
线性输出功率 Output P1dB	P1dB	2500			W
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM			-15	dBc
输入驻波 Input VSWR	VSWRin			2	:1
交流电压 AC Voltage	Vac		380		V AC
功耗 Power Consumption	Pdiss			10	KW
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

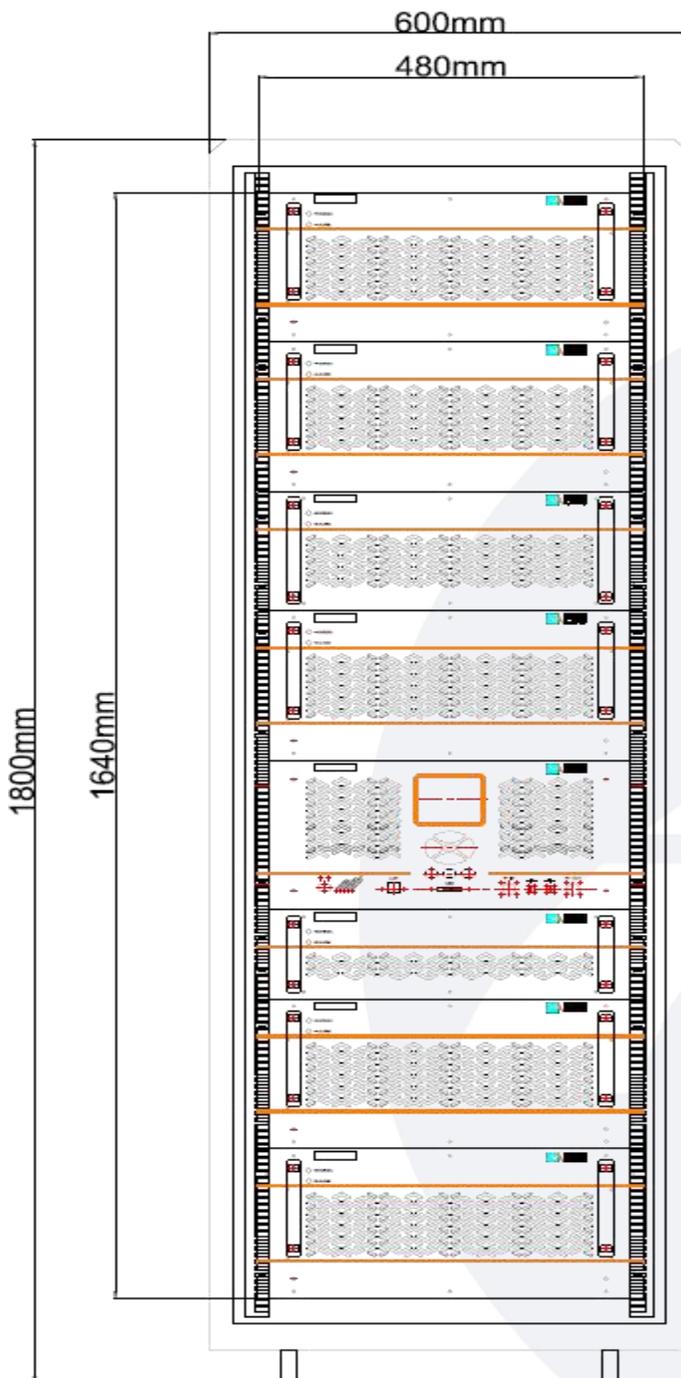
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/7/16 DIN Female (optional)	
正向/反向耦合 Forward/Reverse Coupling	N Female/ N Female (optional)	
尺寸 Size	600*800*1600/19 Inch*1600	mm
重量 Weight	≤200	Kg

Note: Dual directional coupler can be selected as built-in or external..

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 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: 70°C 2, Over voltage 3, Over current 4, Over VSWR: 6:1 (adjustable) 5, Open/circuit break 6, Overexcitation: 3600W
监控和控制 Remote control	GPIB/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*	-20		+40	°C
存储温度 Non-operating Temperature*	-30		+50	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			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			

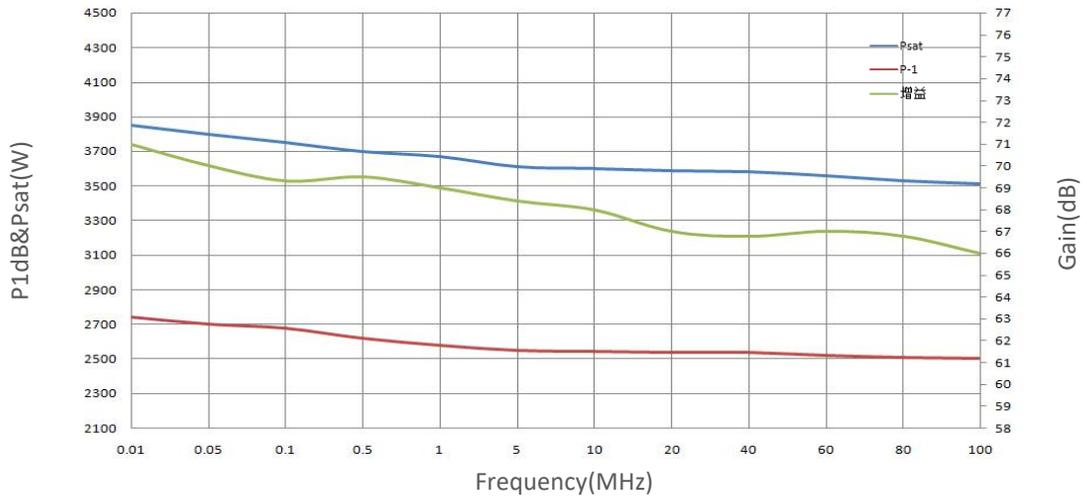
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

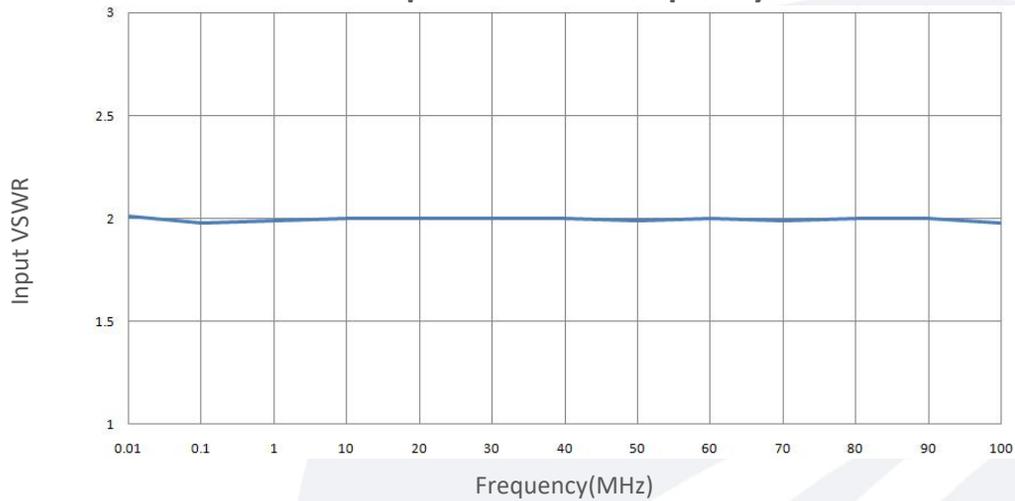
标准型号 Base Number	描述 Description	版本号 Revision
TLPA10K100M-66-66-BC	Solid State High Power Amplifier Systems 10KHz-100MHz, Gain:66dB, Psat:66dBm, 380V AC, Built in Fan Cooling	Rev.1.1

典型曲线 Typical Performance Data:

Power Gain&P1dB&Psat vs Frequency



Input VSWR 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.