

## Solid State High Power Amplifier Systems

6-18GHz/58dB Gain/58dBm Psat/380V AC

Model: TLPA6G18G-58-58-BC

TLPA6G18G-58-58-BC is a solid state high power amplifier systems provides high output power and high gain across the 6 to 18 GHz 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: 6-18GHz
- Gain: 58dB Min
- Psat Output Power:58dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR 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	6-18			GHz
功率增益 Power Gain	GP	58			dB
增益平坦度 Gain flatness	ΔGL		±4.5		dB
饱和输出功率 Output Psat	Psat	58			dBm
线性输出功率 Output P1dB	P1dB	55	57		dBm
杂散 Spurious@Pout=58dBm	Spur			-60	dBc
谐波 Harmonics@Pout=58dBm	HAM		-15	-10	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			15	KW
阻抗 Impedance	I/O-IMP	50			Ohms

## 机械特性 Mechanical Specifications:

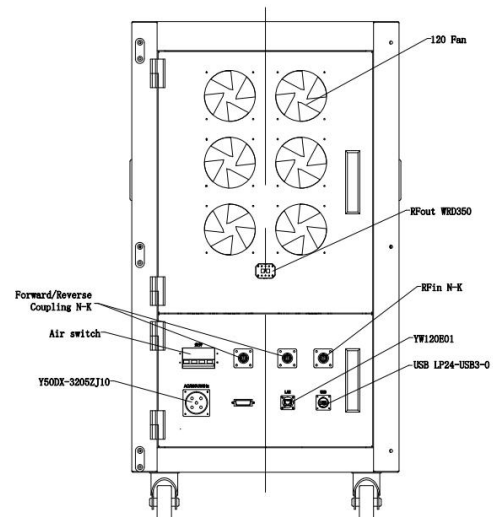
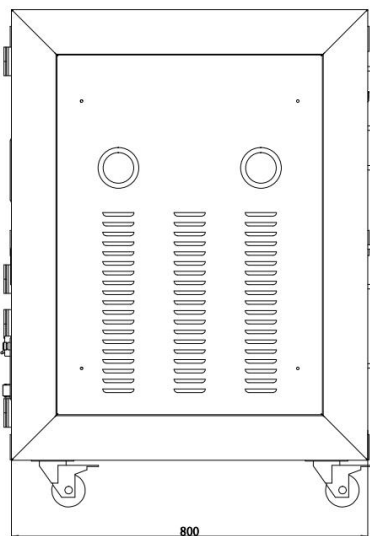
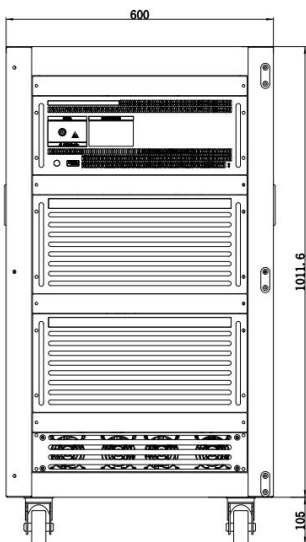
参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	N Female/WRD500D36	
程控接口 Network port Communication	RS422/LAN	
尺寸 Size	20U	
重量 Weight	≤350	Kg

## 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

## 外形图 Outline Drawing:

Unit:mm



## 主要功能 Key Features:

参数 Parameter	特点 Advantages
控制功能 Control functions	Power setting On/Off
内置保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
监控和控制 Remote control	RS422/LAN/GPIB/USB
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			

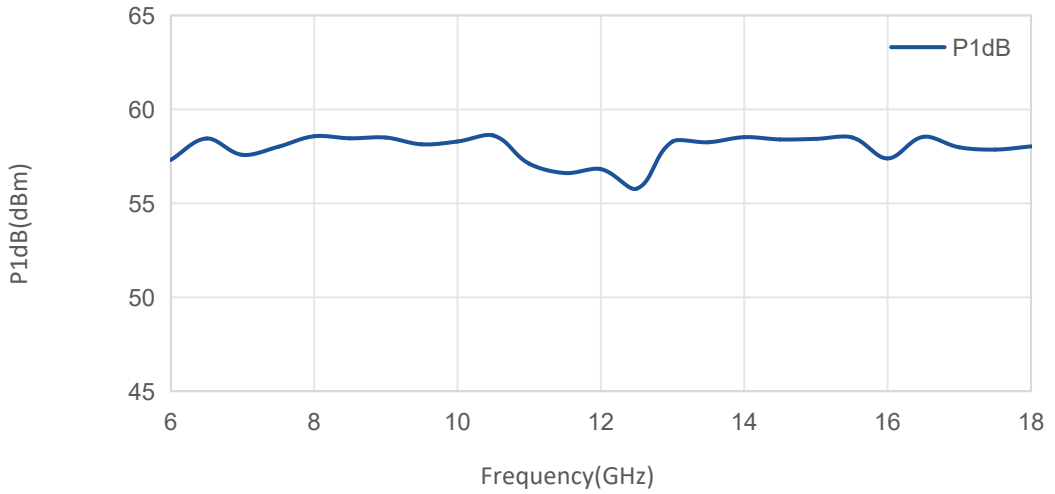
\*Note: For a wider temperature range, please consult the manufacturer.

## 订货信息 Ordering Information:

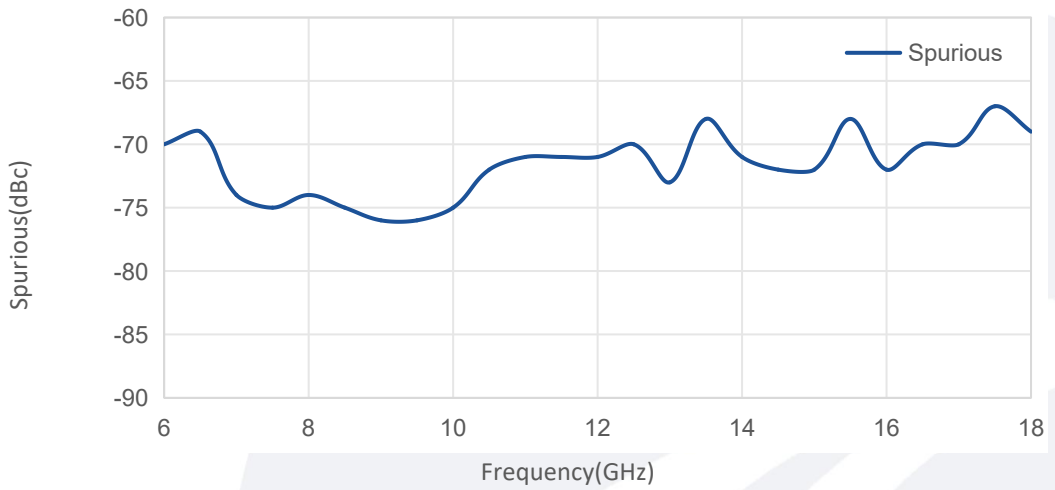
标准型号 Base Number	描述 Description	版本号 Revision
TLPA6G18G-58-58-BC	Solid State High Power Amplifier Systems 6-18GHz, Gain:58dB, Psat:58 dBm, 380V AC, Built in Fan Cooling	Rev.1.1

**典型曲线 Typical Performance Data:**

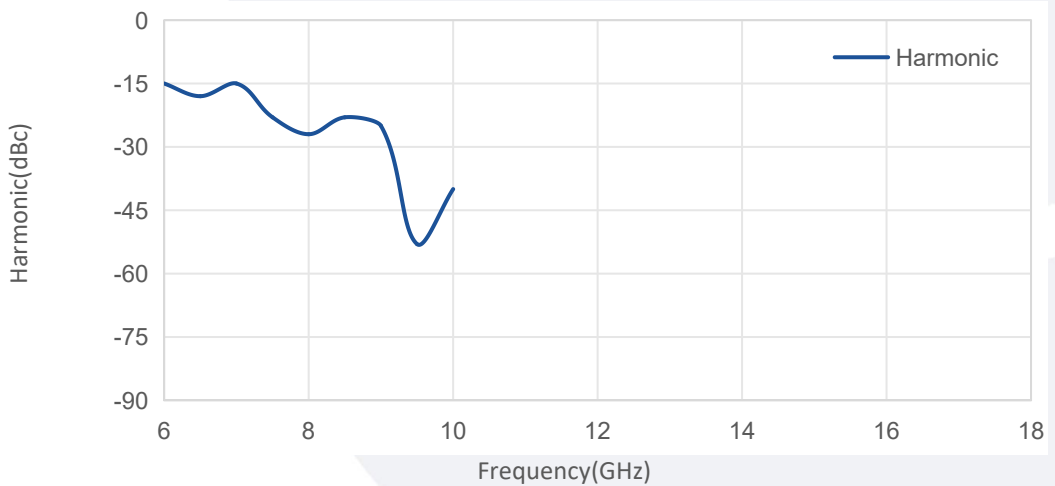
**P1dB vs Frequency**



**Spurious vs Frequency**



**Harmonic 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.