

Solid State High Power Amplifier Systems

5.8-6.8GHz/64dB Gain/64dBm Psat/380V AC

Model: TLPA5.8G6.8G-64-64-BC

TLPA5.8G6.8G-64-64-BC is a solid state high power amplifier systems provides high output power and high gain across the 5.8 to 6.8 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: 5.8-6.8GHz
- Gain: 64dB Min
- Psat Output Power:64dBm Typ
- Protection:Over TEM,input overdrive,over voltage, under voltage ,load 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	5.8-6.8			GHz
功率增益 Power Gain	Gp	64			dB
增益平坦度 Gain Flatness	ΔGL			±3	dB
输出功率调节范围 Output Power Adjustment Range	Padj	20			dB
饱和输出功率 Output Psat	Psat	63	64		dBm
增益稳定度 Gain stability@24h	Gstb			±0.25	dB
增益波动 Gain fluctuation@-40~+55°C	Gvrt		±2		dB
增益斜率 Gain slope	Gslp			±0.02	dB/MHz
杂散 Spurious@Pout=63dBm	Spur			-60	dBc
二次谐波 2nd Harmonics	HAM		-30	-20	dBc
输入驻波 Input VSWR	VSWRin			1.5	:1
输出驻波 Output VSWR	VSWRout			1.5	:1
交流电压 AC Voltage	Vac		380		V AC
功耗 Power Consumption	Pdiss			8	kW
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

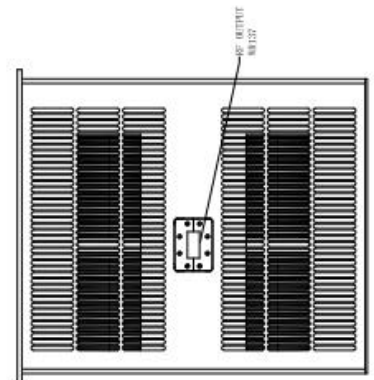
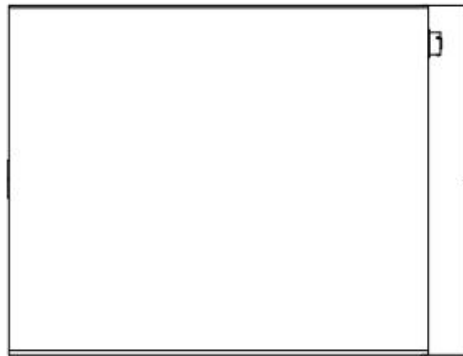
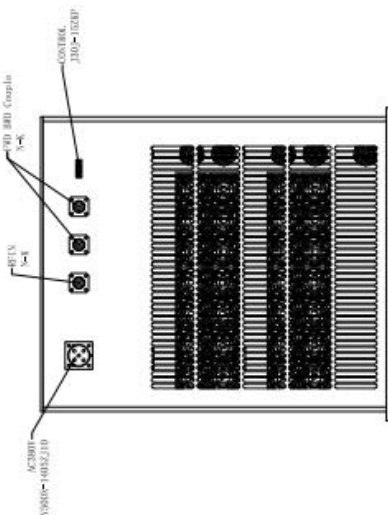
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/WR137	
正向/反向耦合 Forward/Reverse Coupling	N Female/N Female	
重量 Weight	≤100	Kg

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	1, Power setting on/off 2, ALC automatic level control
监测功能 Monitor functions	1, Over TEM 2, Over voltage 3, Over Current 4, Output/Reverse Power
监控和控制 Remote control	RS422/485
冷却系统 Cooling system	Built in Cooling system, forced liquid 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
TLPA5.8G6.8G-64-64-BC	Solid State High Power Amplifier Systems 5.8-6.8GHz, Gain:64dB, Psat:64dBm, 380V AC, Built in Fan Cooling	Rev.1.1