

Solid State High Power Amplifier Systems

1-2GHz /65dB Gain/65 dBm Psat/380V AC

Model: TLPA1G2G-65-65-BC

TLPA1G2G-65-65-BC is a solid state high power amplifier systems provides high output power and high gain across the 1 to 2 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:

- Wide Band: 1-2 GHz
- Power Gain: 65dB Min
- Psat Output Power: 65dBm 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	1-2			GHz
增益 Gain	GP	65			dB
增益平坦度 Gain flatness	ΔGL		± 3		dB
饱和输出功率 Output Psat	Psat	65			dBm
输入功率 Input Power	Pin		-3	0	dBm
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM		-15		dBc
输入驻波 Input VSWR	VSWRin			2.0	:1
交流电压 AC Voltage	Vac	340	380	420	V AC
功耗 Power Consumption	Pdiss	18000@Max			W
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/L29 Female	
正向/反向耦合 Forward/Reverse coupling	N Female/N Female	
液晶显示屏 Front Panel LCD Screen Display	7 inch LCD Screen Display	
尺寸 Size	32U	
重量 Weight	≤350	g

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 2,Over voltage 3,Over current protection 4,Over VSWR
控制 Control	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*	-20		+50	℃
存储温度 Non-operating Temperature*	-45		+65	℃
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
TLPA1G2G-65-65-BC	Solid State High Power Amplifier Systems 1-2GHz,Gain:65dB,Psat:65dBm,380V AC,Built in Fan Cooling	Rev.1.0