

Solid State High Power Amplifier Systems

27.5-30GHz /50dB Gain/57 dBm Psat/220V AC

Model: TLPA27.5G30G-50-50-BC

TLPA27.5G30G-50-50-BC is a solid state high power amplifier systems provides high output power and high gain across the 27.5 to 30 GHz frequency range. The amplifier features a built-in 220V 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: 27.5-30GHz
- Gain: 50dB Min
- Psat Output Power:50dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	27.5-30			GHz
Power Gain	GP	50			dB
Gain flatness	ΔGL	±1.5@200MHz bandwidth			dB
Gain Stability	Gstb	±3@Full temperature range			dB
Output Psat	Psat	50	51		dBm
Output IM3	IM3		-30	-25	dBc
Spurious	Spur			-60	dBc
Noise PSD	ND	-90			dBm/Hz
Input VSWR	VSWRin			1.5	:1
Output VSWR	VSWRout		1.5	1.8	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss	1200@Max			W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

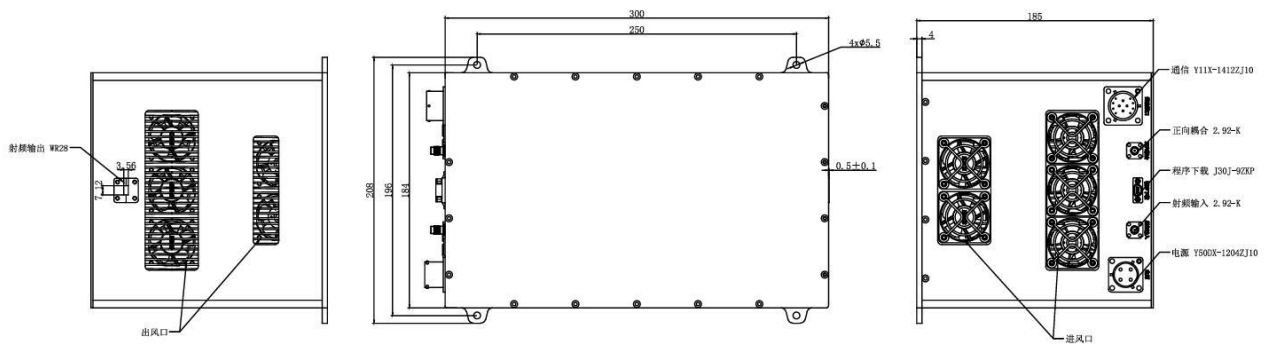
Parameter	Value	Units
Input /Output Connector	2.92 Female/WR-28	
Forward/Reverse Coupling	2.92mm Female/ 2.92mm Female	
Size	300*208*185	mm
Weight	≤25	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off
Monitor functions	Operating voltage, current, temperature, transmitting power and reflection power
内Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Remote control	RS422/LAN
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+55	°C
Non-operating Temperature*	-55		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA27.5G30G-50-50-BC	Solid State High Power Amplifier Systems 27.5-30GHz,Gain:50dB,Psat:50 dBm,220V AC,Built in Fan Cooling	Rev.1.0