

**Model:TLPA27.5G30G-50-50-BC**
**Solid State High Power Amplifier Systems  
 27.5-30GHz,Gain:50dB,Psat:50 dBm,220V AC**
**Feature:**

- 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 Specifications:**

Parameter	Symbo	Min	Typ	Max	Units
Frequency range	BW	27.5-30			GHz
Small Signal Gain	SSGP	50			dB
Gain flatness	$\Delta$ GL	$\pm 1.5$ @Bandwidth=200MHz			dB
Gain Stability	Gstb	$\pm 3$ @Full temperature range			dB
Output Psat	Psat	50	51		dBm
Output IM3	IM3		-30	-25	dBc
Spurious@Pout=46dBm	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:**

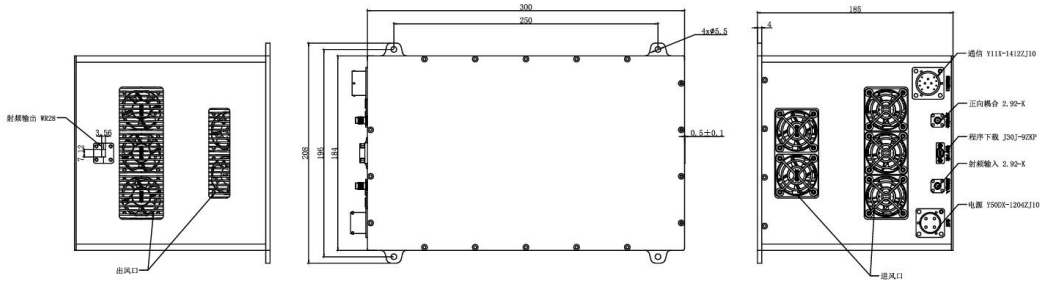
Parameter	Value	Units
Input /Output Connector	2.92 Female/WR-28	
Forward Coupling	2.92 Female	
Size	300*208*185	mm
Weight	$\leq 25$	Kg

**Absolute Maximum Ratings:**

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

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
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	50000			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			

**Ordering Information:**

Part 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