

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

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	5.8-6.8			GHz
Power Gain	Gp	64			dB
Gain Flatness	ΔGL			±3	dB
Output Power Adjustment Range	Padj	20			dB
Output Psat	Psat	63	64		dBm
Gain stability@24h	Gstb			±0.25	dB
Gain fluctuation@-40~+55°C	Gvrt		±2		dB
Gain slope	Gslp			±0.02	dB/MHz
Spurious@Pout=63dBm	Spur			-60	dBc
2nd Harmonics	HAM		-30	-20	dBc
Input VSWR	VSWRin			1.5	:1
Output VSWR	VSWRout			1.5	:1
AC Voltage	Vac		380		V AC
Power Consumption	Pdiss			8	kW
Impedance	I/O-IMP	50			Ohms

Parameter	Value	Units
Input /Output Connector	N Female/WR137	
Forward/Reverse Coupling	N Female/N Female	
Weight	≤100	Kg

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

Unit:mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, ALC automatic level control
Monitor functions	1, Over TEM 2, Over voltage 3, Over Current 4, Output/Reverse Power
Remote control	RS422/485
Cooling system	Built in Cooling system, forced liquid cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	°C
Non-operating Temperature*	-30		+50	°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
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