

Solid State High Power Amplifier Systems

0.1-6GHz/40dB Gain/40dBm Psat/220V AC

Model: TLPA0.1G6G-40-40-BC

TLPA0.1G6G-40-40-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.1 to 6 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:

- Frequency range: 0.1-6GHz
- Gain: 40dB Min
- Psat Output Power: 40dBm Typ
- Protection: Over TEM, over voltage, over current ,protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	0.1-6			GHz
Power Gain	GP	40	45		dB
Gain flatness	ΔGL		± 3	± 4	dB
Output P1dB	P1dB	33	34		dBm
Output Psat	Psat	39	40		dBm
Harmonics	HAM		-10		dBc
Input VSWR	VSWR _{in}		1.5	2.0	:1
AC Voltage	Vac	110	220		V AC
Power Consumption	Pdiss		50	100	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

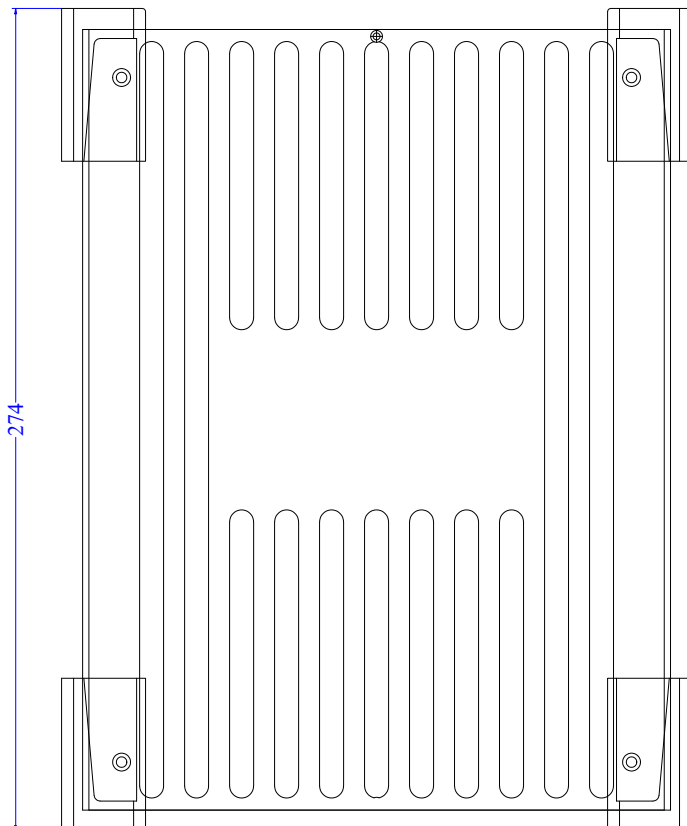
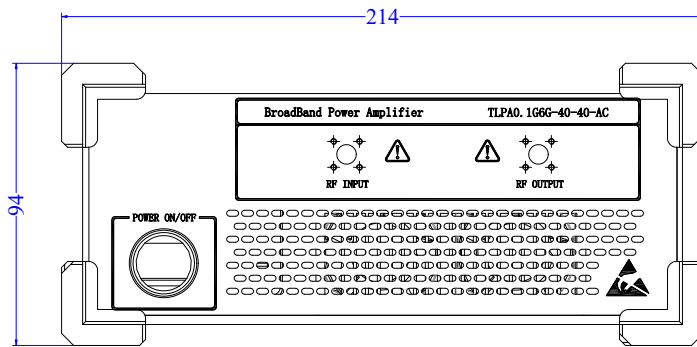
Parameter	Value	Units
Input /Output Connector	SMA Female/ SMA Female	
Size	274*214*94	mm
Weight	≤5	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off
Protection functions	1, Over TEM 2, Over voltage 3, Over current
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°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
TLPA0.1G6G-40-40-BC	Solid State High Power Amplifier Systems 0.1-6GHz, Gain:40dB, Psat:40dBm, 220V AC, Built in Fan Cooling	Rev.1.1