

Model:TLPA2.5G6G-66-54
Power Amplifier
2.5GHz-6GHz,Gain:65dB,Psat:54dBm
Feature:

- Frequency range: 2.5GHz-6GHz
- Gain: 66dB Min
- Psat Output Power: 54 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	2.5-6			GHz
Power Gain	66	68		dB
Gain Flatness		±1.5	±3	dB
Output Psat	54	55		dBm
Harmonic@Pout=54dBm		-15	-10	dBc
Switching Time			50	us
Input VSWR		1.5	2.0	:1
DC Voltage		28	30	V DC
DC Supply Current		50	60	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Bias	D-sub, 5W5	
Size	330*210*30	mm
Weight	2500	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	30
RF INPUT POWER	-5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

DC power Interface,D-sub, 5W5, Female

Pin	Identification	Type	Function specification
1	VCC	Input	Power supply positive ,+26.0-30.0VDC
2	VCC	Input	Power supply positive ,+26.0-30.0VDC
3	VCC	Input	Power supply positive ,+26.0-30.0VDC
4	GND	Input	Power supply negative
5	GND	Input	Power supply negative

Monitor and Control Interface, D-sub, 9-Pin, Female

Pin	Identification	Type	Function specification
1	EN	Input	Amplifier Enable: TTL High (5V) (Internally Pulled-High)
2	RESET	Input	Resets PA when logic LOW is applied and released (Internally Pulled-High)
3	Over Temperature	Output	When the temperature of the case exceeds 60 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 55 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
4	Over Current	Output	Current FAULT:(TTL High= Fault, TTL Low =Normal)
5	Over Voltage	Output	Voltage FAULT:(TTL High= Fault, TTL Low =Normal)
6	Current Sensor	Output	0.1V/A
7	Temperature Sensor	Output	$VO = 10 \text{ mV}/^{\circ}\text{C} \times T^{\circ}\text{C} + 600 \text{ mV}$
8	GND	Input	Ground
9	NC		No internal connection

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-20		+55	°C
Non-operating Temperature	-30		+70	°C
Relative humidity		95		%
Altitude	30,000			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			

Ordering Information:

Part Number	Description	Revision
TLPA2.5G6G-66-54	Power amplifier 2.5GHz-6GHz,Gain:66dB,Psat:54dBm, 28V DC, Without Heatsink	Rev.1.0
TLPA2.5G6G-66-54-HS	Power amplifier 2.5GHz-6GHz,Gain:66dB,Psat:54dBm, 28V DC, With Heatsink	Rev.1.0