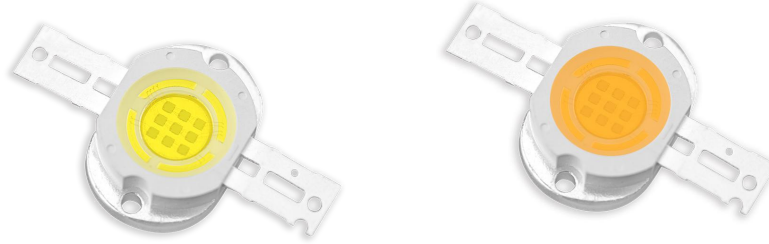


GT-P10W-XX



Product Description

Getian P10W white high power led series has been widely applied to plant grow lights, Aquarium Lights , and landscape lights, etc with ultimate cost performance and stability. Unique and perfect raw materials combination of Getian and strict reliability tests (eg: temperature shock test; high temperature aging test etc) ensures its stability and excellent performance in heat conduction, CCT unity, light quality and super high light output.

Features

- red copper base with high heat conductivity
- integrated circuit with wide viewing angle
- RoHS Compliant.
- >50000Hrs

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Application

- indoor lighting;
- down lights, flood lights, high bay lights, street lights, etc.



Characteristics

Characteristics	Unit	Min	Typical	Max
Dimension L*W	mm		37.8*22.48	
Diameter of Luminous Area Φ	mm		7.31*7.31	
Beam Angle θ	deg.		120	
Wavelength WL	nm	2900		7000
Power Dissipation PD	W		10	
Operating Temperature Top	°C	-40		+60
Storage Temperature Tst	°C	0		+60
Testing Point Tc	°C			65
Junction Temperature Tj	°C			115
Reverse Current (Vr=5V) Ir	mA			/
ESD (HBM)	V			2000
Hand Soldering (Lead-Free) HST	°C			350

Coding Rules

Model	GT	P	10W	XX	X	X	X	X	X
Code	GT	P	Type	Emitting Code	Chip Size	Chip QTY	Beam Angle	Power	LM
Meaning	Getian	High Power Series	10W:10W Holder	W3:2900-3200K W4:4000-4500K W5:5500-6000K W6:6000-6500K	3:33mil 4:42mi 4:45mil	9:9EA	0:120°	10:10W	900:900-1000 1000:1000-1100

Specifications (Tc = 25 °C)

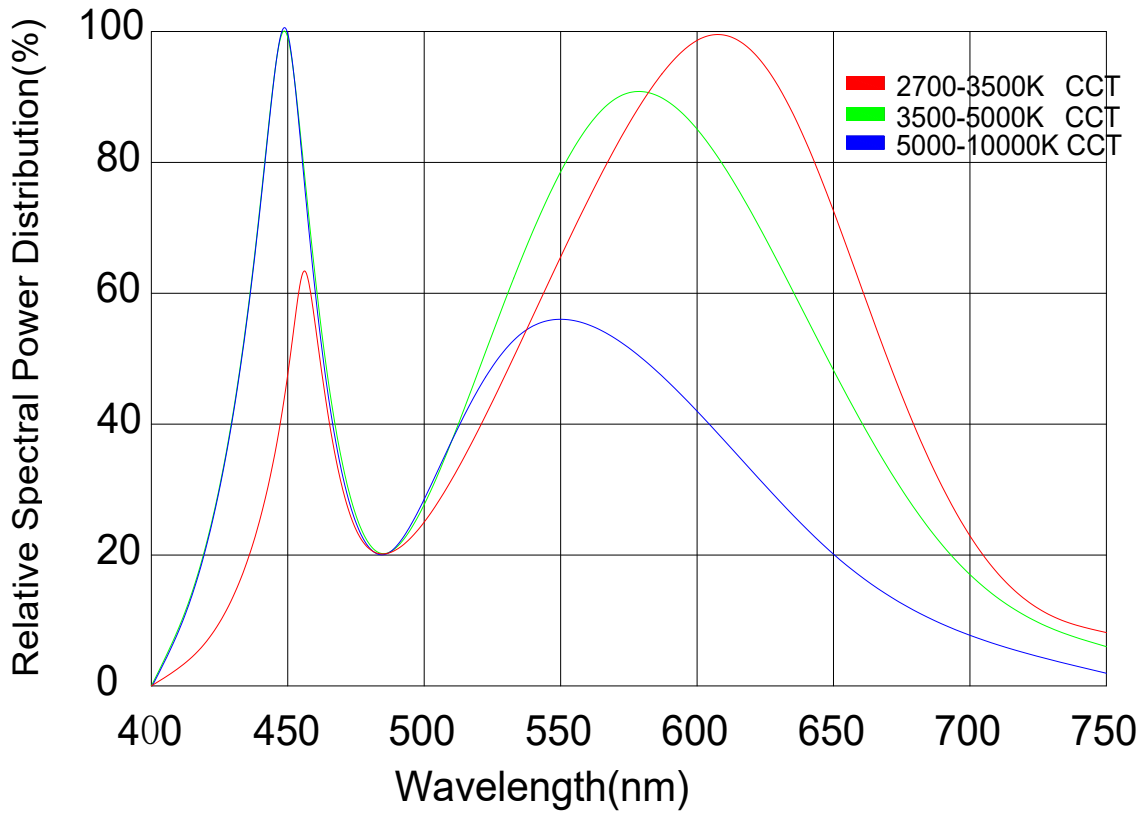
Standard If: 1050mA		Typical Vf: 9V		Power: 10W	Thermal Resistance: 1.33°C/W	
Color	Color Temperature (K)		CRI	9-11V @1050mA		Part No.
	Min	Max		lm		
Warm White	2900	3200	70	900-1000		GT-P25WW349010900
Neutral White	4000	4500	70	900-1000		GT-P25WW449010900
	5000	5500	70	1000-1100		GT-P25WW5490101A
Pure White	5500	6000	70	1000-1100		GT-P25WW5490101A
	6000	6500	70	1000-1100		GT-P25WW6490101A

Notes:

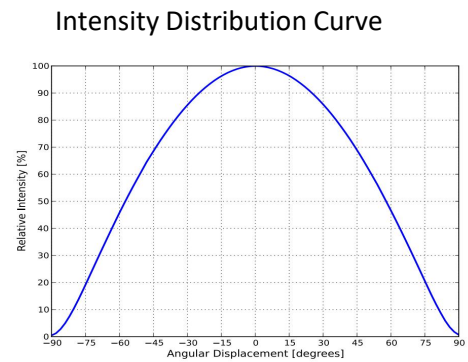
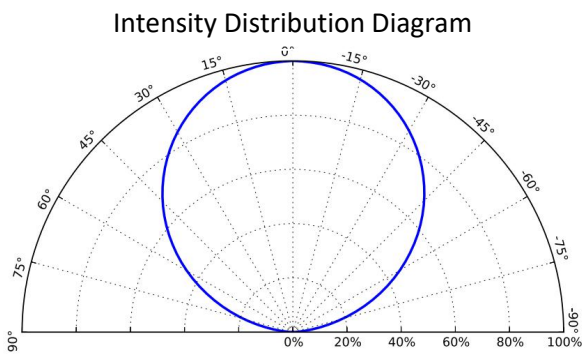
Above charts include the most regular specs for Color COB leds for reference. Please consult sales representative for specs that are not listed or please visit www.getiangroup.com.

Machine Tolerance $\pm 3\%$ on luminous flux.

Spectral Features (Tc = 25°C)

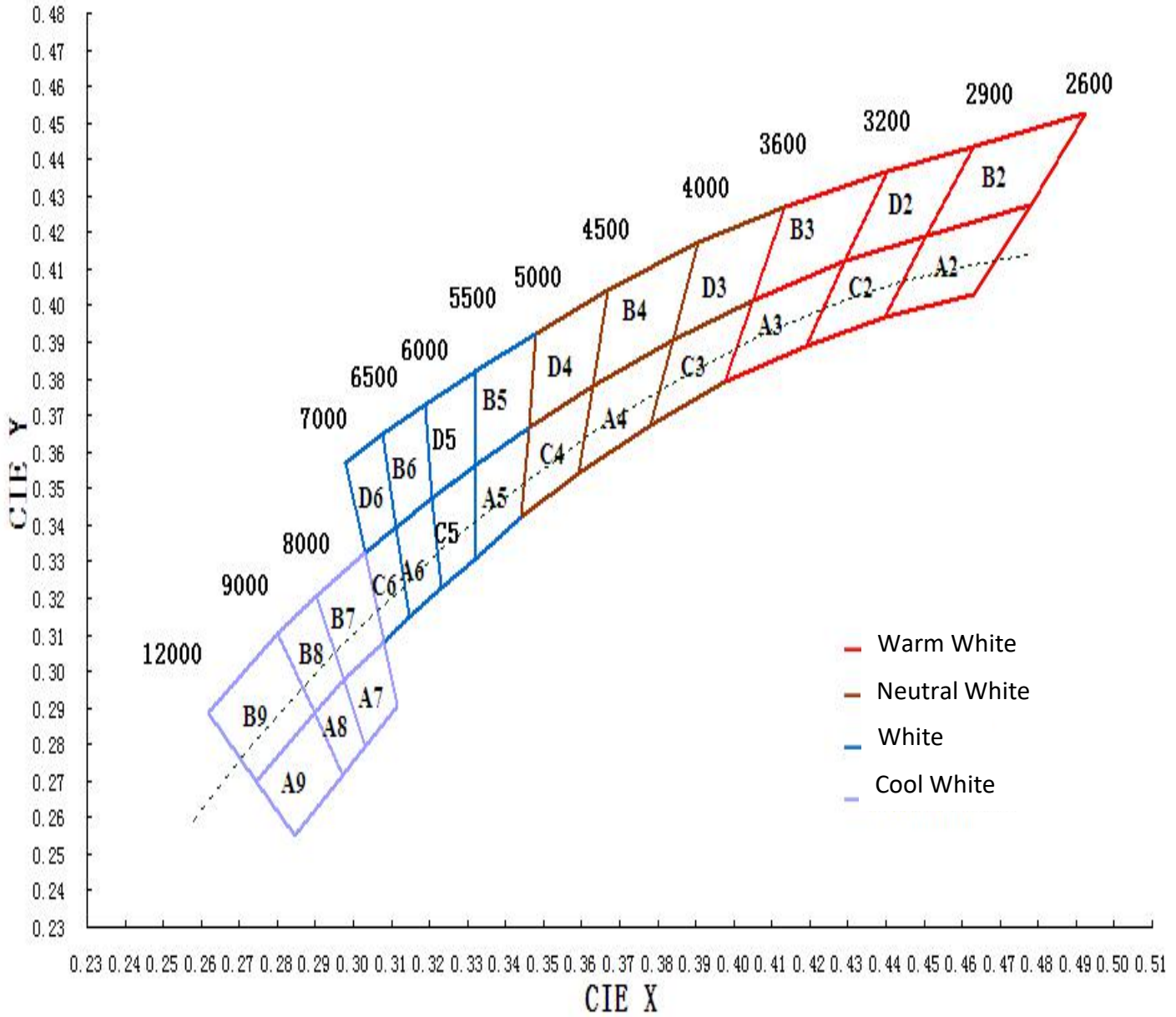


Typical Spatial Distribution (Tc = 25°C)



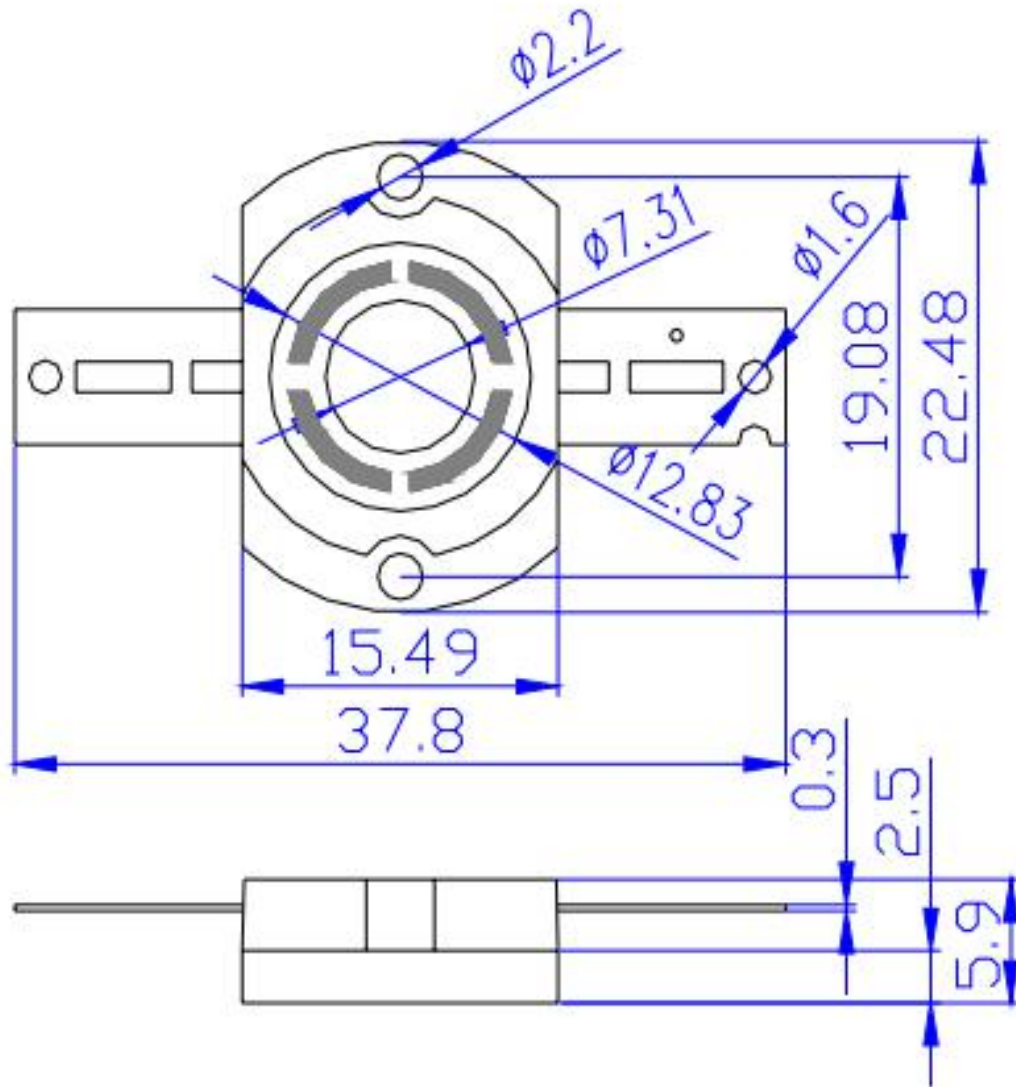
White Binning Information (1931CIE)

White Binning Information



Dimensions(Unit:mm)

Tolerance +/-0.5mm



Reliability Tests

Test Items	Test Conditions
Aging Test	10W/IF=1050mA Ta=25°C×1000hrs
	10WIF=1050mA Ta=85°C×1000hrs
High Temperature Storage	100°C × 1000 hours
Low Temperature Storage	-40°C × 1000 hours
High Temp & Humidity	10W/IF=1050mA 85°C, 85 %RH for 1000 hours
Temperature Shock	-40°C × 30 minutes – +100°C × 30 minutes, 100 cycle
ESD (HBM)	2000V HBM/Time

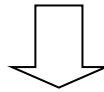
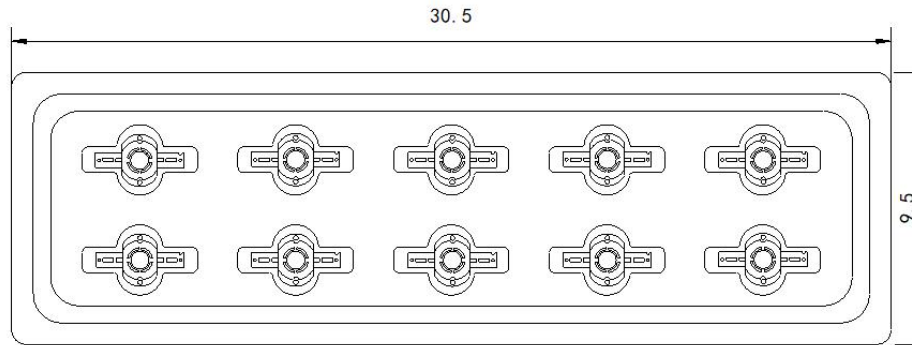
Criteria for Judging LED Failure (Tc=25°C)

Items	Symbol	Test Conditions	Criteria for Judging LED Failure
Forward Voltage	VF	10W /IF=1050mA	>U × 1.1
Luminous Flux	φv	10W/IF=1050mA	<S × 0.7

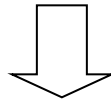
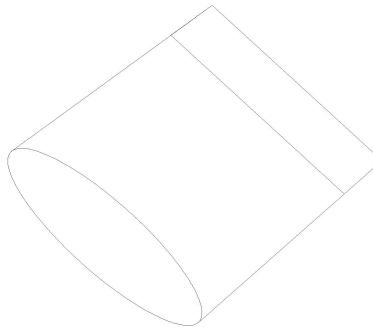
U refers to max value; S refers to initial value.

Notes: Judging criteria based on Tc=25°C.

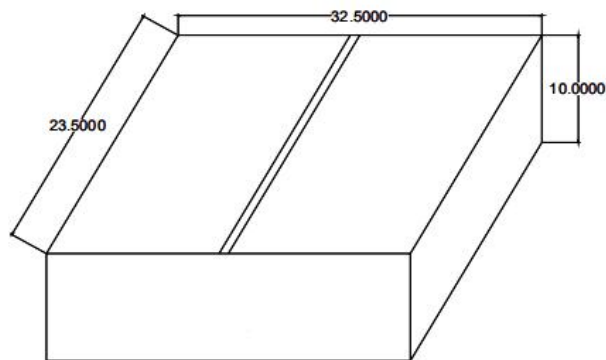
Packaging (Unit:mm)



①



②



Packaging Details

Tray:10pcs/Tray

Notes

Product Specifications

This is a product family data sheet without extra emphasis on a specific model. The specifications in the document refers to its general value under certain test conditions. Please consult sales representative or technical people if encounters specs that are not listed. (Tolerance should be considered).

Operation Tips

1. Please do not press emitting surface;
2. Please do not pour out products from trays or overlay them;
3. Keep the power supply lines 2-3mm striped and tin immersed;
4. Do not touch the emitting surface or the white dam by the soldering iron during soldering process;
5. Soldering time should be less than 5 seconds.;
6. Keep the soldering point clean and neat with no bulge, bend or cold-joint.
7. Instant test time less than 3 seconds.
8. Recommend to use thermal grease with conductivity >2.5.
9. Please keep the thermal grease inclusion-free;
10. Thermal grease spreading area should be a bit larger than the led substrate;
11. Thermal grease evenly spread with thickness about 0.1mm;
12. Place led flatly and do no push from side in case grease scraped;
13. Lens cover should be 0.2mm diameter larger than the COB emitting surface.

Service Conditions

The products must be operated within the rated range of parameters. Constant current drivers are recommended.

ESD Protection

Statics or surge volt would cause LED failure. When using the products, we suggest wearing anti-static wrist strap or gloves. All devices, equipment and machinery must be grounded. Precautions should be taken to protect the products from the surge voltage generated by the devices. It is recommended to inspect each LED whether it is electrostatic damaged. Inspection can be done by a indicating lamp or low forward current test (suggest 90mA). The destroyed products shows different features, for example, the forward voltage becoming lower, or no light emission under low current.

Heat Dissipation

The thermal design of the end product is particularly important, please consider it seriously. Do avoid high temperature condensation on the product.

Cleaning

Recommend ethanol as the only clean solvent.

Others

The bright light emitted by LED may hurt the eyes. Do not look directly at the products when not wearing protective glasses. The strong irritant glare makes people feel uncomfortable and precautions should be taken during usage.