DATASHEET

DS5X5 230VAC 100W

100W DOB LED

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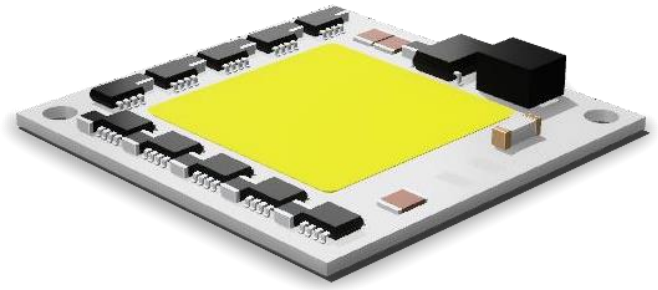
+90 224 443 05 84

Revision Date:19/02/2025



FEATURES

High Power LED

Long Working Life

Power Efficiancy

120° Wide llumination Angle

No Driver Usage

Aluminium PCB

* Production in custom Kelvin values is available.

APPLICATION AREAS

Outdoor Lighting

High Ceiling Fixtures

Street Lighting

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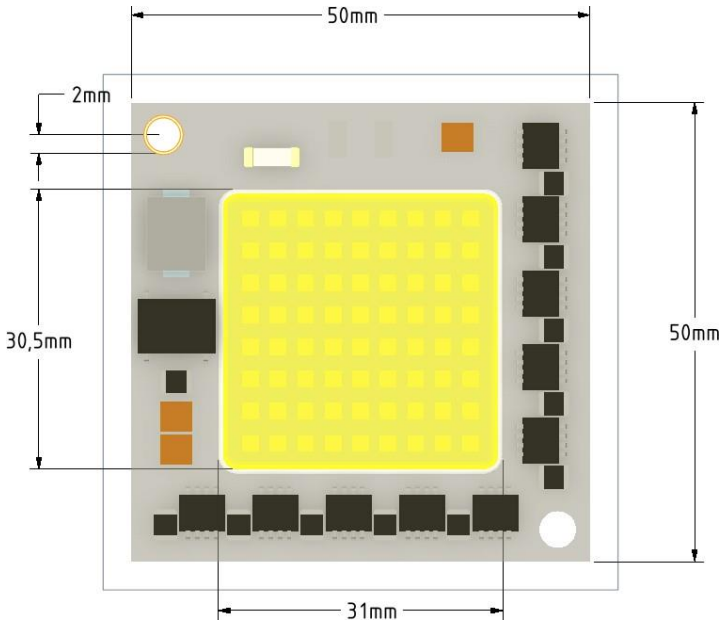
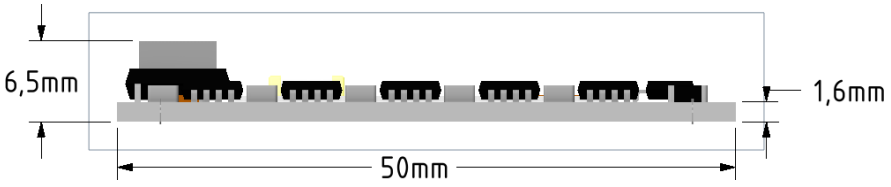
DIMENSIONS (mm)



Top View



Side View

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ELECTRICAL PROPERTIES

Initial Optical/Electrical Characteristic Ta=25˚C (Room Temperature)

Parameter	Symbol		Min.	Ort.	Max.	Unit
Operating Voltage	Vf1	If=10µA	220	--	230	VAC
Suggested Operating Voltage	If		450	480	500	mA
Optical Output Power			100	105	110	W
Luminous Flux	Iv		12000	12600	13200	lm

*Please contact us for your special requests.

Absolute Maximum Ratings Ta: 25˚C (Room Temperature)

Parameter	Symbol	Condition	Value	Unit
Storage Temperature	Tstg		-40 ~ 85	˚C
Operating Temperature	Topr		-40 ~ 85	˚C
Soldering Terms*	Tsol	≤10 seconds	≤260	˚C

*Our products are suitable for SMD Pick and Place and reflow soldering. We can not guarentee the results for manual soldering and different temperatures

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Assembly Guidelines

*A heat sink plate must be used during assembly. Mounting to the plate should be performed using thermally conductive adhesive or thermal paste. The mounting surface must be completely flat and smooth and must not flex under mechanical stress.

*If screws are used for mounting, there must be at least two fastening points.

*Do not touch the silicone lens during assembly. As the lens may soften due to heat during LED operation, no mechanical force should be applied on it. Any mechanical impact or stress on the lens may cause permanent damage.

*When soldering the terminals, avoid contact between the solder and the aluminum body. Soldering must be confined strictly to the designated soldering areas. Exceeding these areas may result in leakage currents and irreversible damage to the product during operation.

*If cleaning is necessary after assembly, use isopropyl alcohol only. The use of other cleaning agents may cause unpredictable damage.

Cautions

*The circuit must be designed to ensure that the Absolute Maximum Ratings are not exceed for each LED. The LEDs should be operated at a constant current per LED. In the case of operating at a constant voltage, serial connection is recommended.

*If shunt connection is used, it may cause the currents flowing through the LEDs to vary due to the variation in the forward voltage characterictics of the LEDs on the circuit.

*This LED is designed to be operated at a forward current. Ensure that no voltage is applied to the LED in the forward/reverse direction while the LED is off. If the LEDs are used in an environment where reverse voltages are applied to the LED continuously, it may cause

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electrochemical migration to occur causing the LED to be damaged. When not in use a long period of time, the system's power should be turned off to ensure that there are no issues.

*When using the LEDs with a dimmer, the color may vary depending on the current through the LED, it is recommended to operate the LED with PWM to minimize this issue.

*If the LEDs are used for outdoor applications, ensure taht necessary measures are taken.

Electrostatic Discharge (ESD)

*This LED is sensitive to transient excessive voltages. If this excessive voltage occurs in the circuit, it may cause the LED to be damaged cauisng issued. Ensure that when handling the LEDs, necessary measures are taken to protect them from an ESD discharge.

*Ensure that all necessary measures are taken to prevent the LEDs from being exposed to transient excessive voltages.

*If the tool used is an insulator, ensure that necessary measures have been taken to protect the LED from transient excessive voltages.