DATASHEET

OSRAM
Opto Semiconductors

ILS :::
**Intelligent**
LED Solutions

Dragon3 Coin Whites

ILC-GD03-XXXX-SD101

Product Overview

- Compact and powerful LED light source
- Available in white, with five colour temperature options
- Simple Plug and Play with industry standard connectors
- Low profile
- Aluminium PCB for optimal thermal management

Applications

- General Lighting
- Halogen replacement
- Architectural lighting
- Task lighting
- Retail and Entertainment lighting
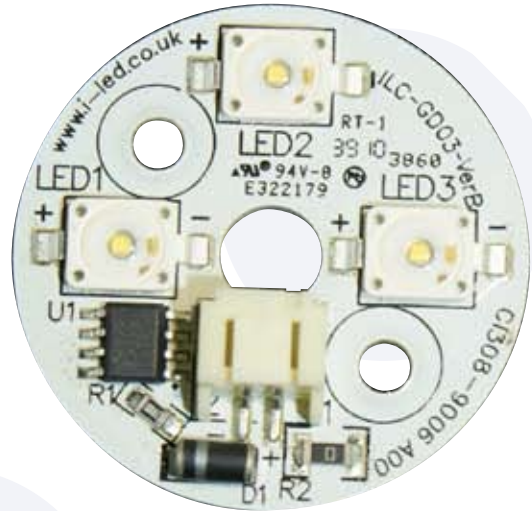
Technical Features:

- Each board contains 3 Osram Golden Dragon Plus LEDs
- Up to 70,000 hour lifetime to 70% of original brightness (L50 B70)
- Mounting holes (3mm diameter) allows easy installation with screws
- Printed circuit board size is 33mm diameter, 1.6mm thick
- Brightness adjustable by external dimming gear
- Single 12v input voltage, each board has own regulation built-in
- Operation with 12VDC power supply

Important Information and Precautions

- The Dragon3 coin, when powered up, is very bright thus it is advised that you do NOT look directly at it. Turn the Dragon3 coin away from you and do not shine into the eyes of others.
- Dragon3 coins will overheat in operation if not attached to a suitable heat-sink. Over heating can cause failure or irreparable damage.
- Dragon3 coins, when operated, can reach high temperatures thus there is risk of injury if they are touched.

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Product Options

ILS PART NUMBER	Colour	Colour Temp* (Degrees Kelvin)	Typical Wattage §	Supply Voltage	Flux at 350mA*	Radiance Angle	Relevant Osram Data
ILC-GD03-ULWH-SD101.	Cool White	6000K-6500K	4.2 watts	12 volts	< 390 lms	170˚	LUW W5AM
ILC-GD03-DWWH-SD101.	White	5600K	4.2 watts	12 volts	< 390 lms	170˚	LW W5AM
ILC-GD03-NUWH-SD101.	Neutral White	4000K	4.2 watts	12 volts	< 326 lms	170˚	LCW W5AM
ILC-GD03-WMWH-SD101.	Warm White	3000K	4.2 watts	12 volts	< 291 lms	170˚	LCW W5AM
ILC-GD03-HWWH-SD101.	Hot White	2700K	4.2 watts	12 volts	< 291 lms	170˚	LCW W5AM

Data is related to the entire Dragon3 coin

*Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

§ Tolerance +/- 10%

Minimum and Maximum Ratings

ILS PART NUMBER	Operating Temperature at Tc-Point [˚C]*	Storage Temperature [˚C]*	Voltage Range [VDC]*	Reverse Voltage [VDC]*
ILC-GD03-ULWH-SD101.	-20...75	-30...85	11.00..13.00	Not Allowed
ILC-GD03-DWWH-SD101.	-20...75	-30...85	11.00..13.00	Not Allowed
ILC-GD03-NUWH-SD101.	-20...75	-30...85	11.00..13.00	Not Allowed
ILC-GD03-WMWH-SD101.	-20...75	-30...85	11.00..13.00	Not Allowed
ILC-GD03-HWWH-SD101.	-20...75	-30...85	11.00..13.00	Not Allowed

* Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the Dragon3 coin.

Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the Dragon3 coin.
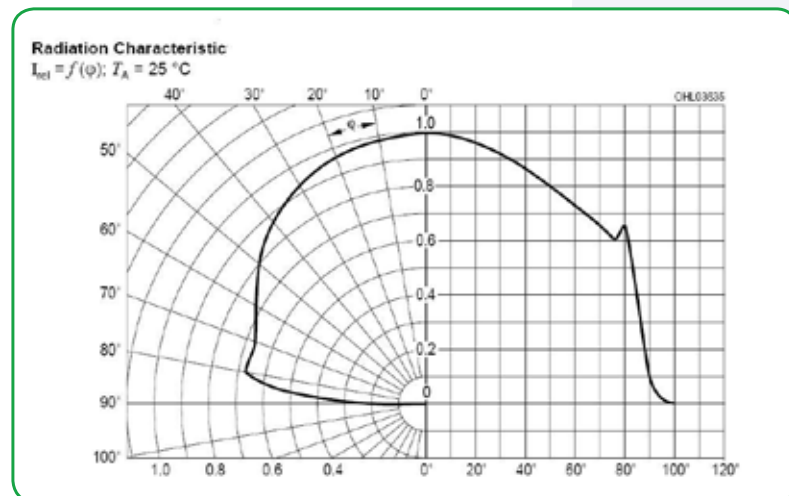
The temperature of the Dragon3 coin must be measured at the Tc-Point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.
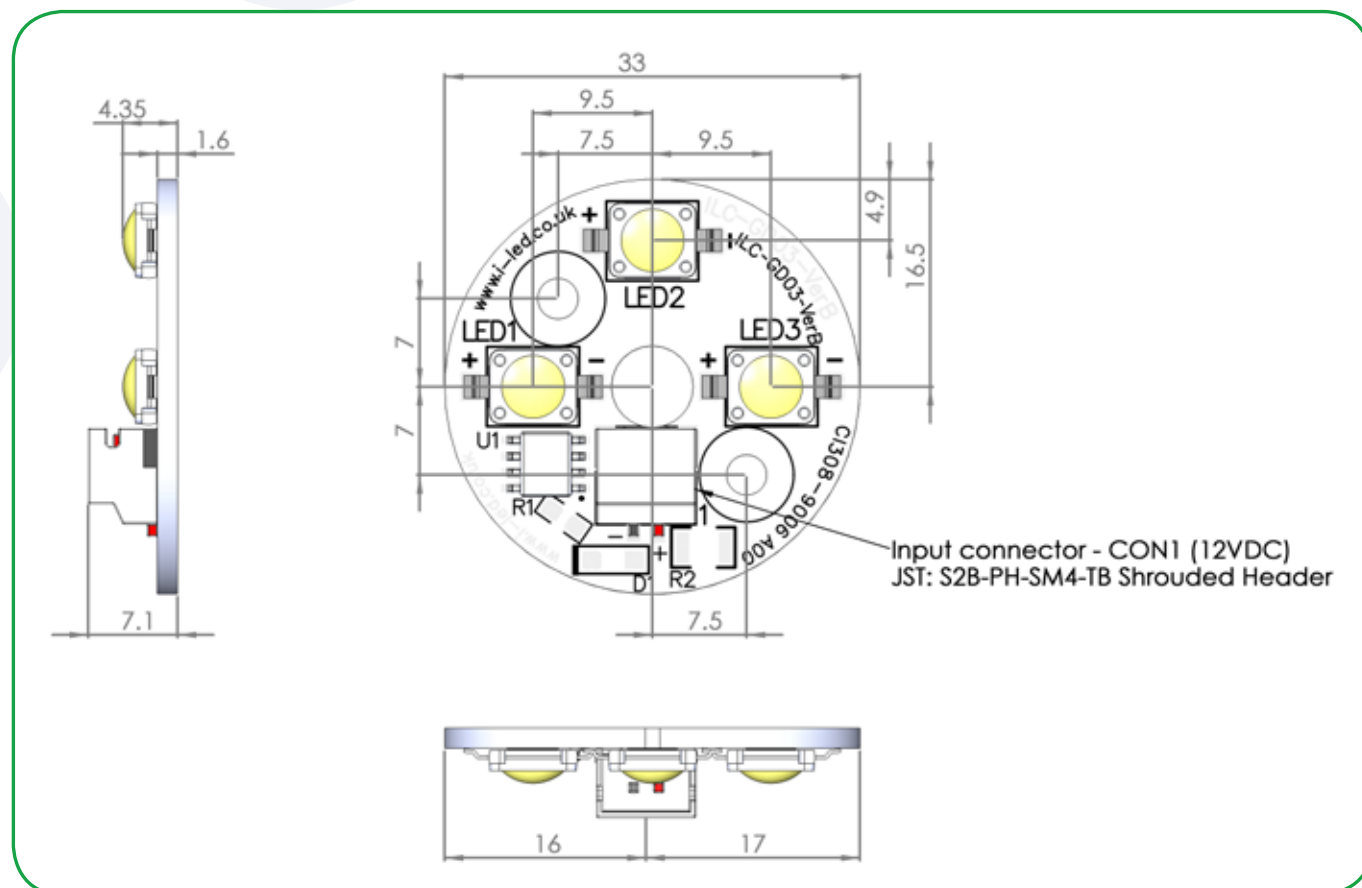
Pin Out

Pin Number	Description
1	12 VDC
2	Ground

Input cable available: CAB-ILS-GD03

Radiation of single LED

Radiation Characteristic
$I_{rel} = f(\varphi); T_A = 25\ °C$

Technical Drawing

Input connector - CON1 (12VDC)
JST: S2B-PH-SM4-TB Shrouded Header

Assembly Information
- The mounting of the Dragon3 Coin has to be on a metal heat sink.
- In order to optimise the thermal management the metal surface needs to be clean (dirt and oil free) and planar for the best contact with the LED module. A thermal grease or heat transfer material is highly recommended

Safety Information
- The Dragon3 Coin itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- The mounting of the module is carried out by attaching it at the mounting holes. Metal mounting screws must be insulated with synthetic washers to prevent circuit board damage and possible short circuiting.
- To avoid mechanical damage to the connecting cables, the boards should be attached securely to the intended substrate. Heavy vibration should be avoided.
- Observe correct polarity!
- Depending on the product incorrect polarity will lead to emission of red or no light. The module can be destroyed!
- Pay attention to standard ESD precautions when installing the Dragon3 Coin.
- The Dragon3 Coin, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be accepted as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For outdoor usage, a housing is definitely required to protect the board against environmental influences. The design of the housing must correspond to the IP standards in the application. It is also the responsibility of the user to ensure any housings or modifications keep the Tc junction temperature to within stated ranges.
- To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards: CE: EC 61374-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61374-2-13 and IEC/EN 62384.

For further information please contact ILS.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

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