

FUJI CO., LTD

1F, NO.32, JIANGUO N. RD., JUNGLI CITY.TAOYUAN, TAIWAN 320, R.O.C.

TEL : 886-3-425-4927

FAX : 886-3-426-9652

SPECIFICATION

P/N: LC-MD1123-03

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Examples: Diameter =38mm (Standard product)



Description

The *LC-MD1123-03* is a modular LEDs Array of 1W/3W/5W (Luxeon) high power LEDs. This product line provides simple and compact solution for traditional lighting in different size fitted into existing fixture. With special aluminium/copper base PCB structure, the LEDs have stable light output and lifetime while the heat is efficiently managed. *Other size, other LED, other colour pattern, and other array layout are available on request.*

Also, please pick up the LED CCD Driver from our Alva product series if you need the LED driver for this module, or pick up the LED talent module from our LCT product series if you need the integrated module that includes LED module and LED CCD Driver.

Features

- The heat is efficiently managed at preferable working temperature.
- Small/Compact size.
- Easy for being retrofitted into existing traditional lighting fixture

Benefits

- Have flexible configurations including Warm white, White, Red, Green, Blue, Amber and RGBW mixed and other customized configuration.
- Light weight
- Enhance the value of your products
- Provides flexibility to designers
- It is a hazard free product
- It can be integrated into existing lighting system
- Facilitates new fixture design
- Facilitates low profile fixture design
- Optimisation of the usage of the system power.

Typical Applications

- Architectural lighting
- Garden lighting
- In-ground lights.
- Floodlight.
- Reading lamps
- Cove lighting
- Cornice lighting
- Landscape lighting
- Under-Water lighting
- Vending machine lighting
- Wall sconces
- Under-cabinet lighting
- Projectors
- Decorative lights
- Pool/fountain lights

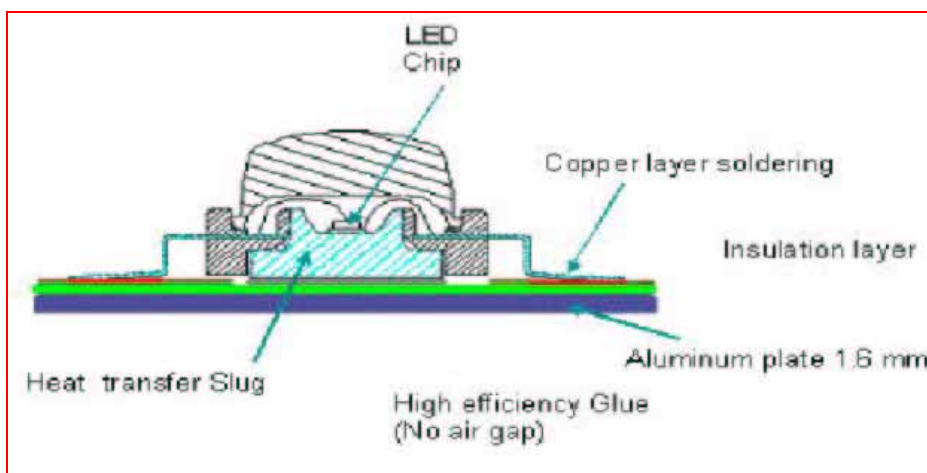
Note:

1. This MCPCB product required additional heat sink.
2. System to keep working temp at preferable temperature 55

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Construction of MCPCB / LED:



PS: Unique construction of Metal Core Print Circuit Board (MCPCB) with slug through contact to Aluminium substrate transferring heat from LED chip straight away and quickly to outside environments.

| Selection Guide | |
|--------------------|-------------------------------------|
| Part Number | Description |
| LC-MD1123-03-1WW-B | 1W Warm White/3 LEDs array/Batwing |
| LC-MD1123-03-1W-B | 1W White/3 LEDs array/Batwing |
| LC-MD1123-03-1W-L | 1W White/3 LEDs array/Lambertian |
| LC-MD1123-03-1W-S | 1W White/3 LEDs array/Side emitting |
| LC-MD1123-03-1R-B | 1W Red/3 LEDs array/Batwing |
| LC-MD1123-03-1R-L | 1W Red/3 LEDs array/Lambertian |
| LC-MD1123-03-1R-S | 1W Red/3 LEDs array/Side emitting |
| LC-MD1123-03-1G-B | 1W Green/3 LEDs array/Batwing |
| LC-MD1123-03-1G-L | 1W Green/3 LEDs array/Lambertian |
| LC-MD1123-03-1G-S | 1W Green/3 LEDs array/Side emitting |
| LC-MD1123-03-1B-B | 1W Blue/3 LEDs array/Batwing |
| LC-MD1123-03-1B-L | 1W Blue/3 LEDs array/Lambertian |
| LC-MD1123-03-1B-S | 1W Blue/3 LEDs array/Side emitting |
| LC-MD1123-03-1A-B | 1W Amber/3 LEDs array/Batwing |
| LC-MD1123-03-1A-L | 1W Amber/3 LEDs array/Lambertian |
| LC-MD1123-03-1A-S | 1W Amber/3 LEDs array/Side emitting |
| LC-MD1123-03-1M-B | 1W RGBW/3 LEDs array/Batwing |

| | |
|---------------------|------------------------------------|
| LC-MD1123-03-1M-L | 1W RGBW/3 LEDs array/Lambertian |
| LC-MD1123-03-1M-S | 1W RGBW/3 LEDs array/Side emitting |
| LC-MD1123-03-1XXX-X | 1W Customized/3 LEDs array |

Note: The **XXX-X** is the project code of the customized products.

Electrical characteristics

Input

| Parameter | Min | Max |
|---------------------|--------|-------|
| Input Voltage Range | 5.4Vdc | 15Vdc |
| Input Frequency | - | - |
| Input Current | 315mA | 385mA |
| Efficiency | - | - |

Note: The **Input Voltage range** is depended on the LEDs that you have selected. (Contact our engineer for the detail)

Environmental Ratings

| Parameter | Min | Max |
|-------------------------------|-----|-----|
| Operating Ambient Temperature | -10 | 60 |
| Storage Ambient Temperature | -20 | 80 |

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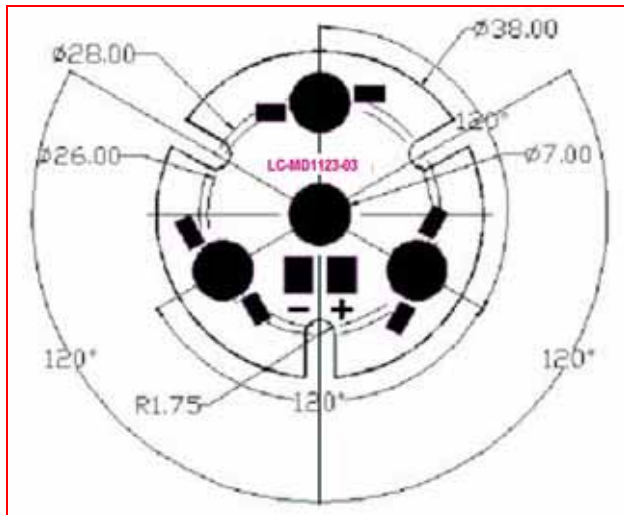
LED Selection (per Luxeon from LUMILEDS)

| Color | Radiation pattern | Dominant wavelength nm | LED Watts | Lumens / emitter |
|------------|---|------------------------|-----------|--------------------|
| Red | Batwing/ Lambertian / Side emitting | 630 | 1 | B:27 / L:42 / S:40 |
| Amber | | 594 | 1 | B:25 / L:42 / S:38 |
| Green | | 525 | 1 | 48 |
| Blue | | 470 | 1 | 16 |
| White | | 5500 K | 1 | 40 |
| Warm White | Batwing | 3000 – 3500 K | 1 | 20 |

Drawing and Diagram

Plate Diameter $\Phi=38\text{mm}$;

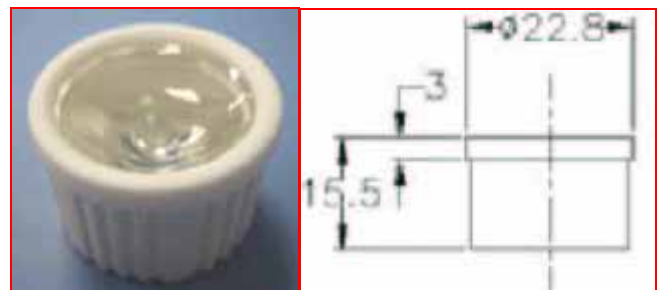
Plate thickness : 1.6mm.



Note:

1. Surface finish : Black / White Solder resist paint.
2. LED on PCB Circuit : 3LEDs in series (other circuit layouts available on request)
3. Connection : 2 open soldering terminals.
4. Option : 10° / 15° / 20° / 25° / 45° Acrylic lens (click-in per each LED), Other lens subject to optional.

10° / 15° / 20° / 25° / 45° Lens holder dimension



5. Recommended max. PCB temperature : + 55

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Important: Please contact our engineer to ensure installation and maintenance being properly executed to obtain maximum performance, efficiency and durability from the LED lighting product.

Disclaimer: While every care has been taken with the details on this specification sheet, we accept no responsibility for any inaccuracies and reserve the right to change these specifications without notice to always ensure that you are receiving a superior product.