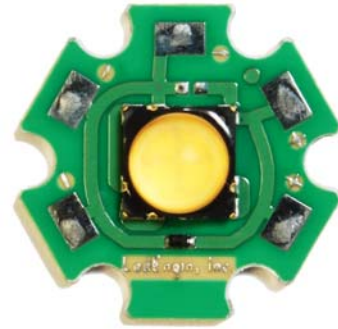


# 10W Emitter on Serially Connected MCPCB Option **LZ4-4xxx10**













## Key Features

- Typical Thermal Resistance for MCPCB adds only 2°C/W
- Multiple mounting options
- MCPCB contains a Zener Diode for enhanced ESD protection

## Available Products

Table 1:

Colors	10W Part Number	Emitter Link <sup>[1]</sup>
Red	LZ4-40R110	
Deep Red	LZ4-40R210	
Green	LZ4-40G110	
Blue	LZ4-40B210	
Amber	LZ4-40A110	
Cool White	LZ4-40CW10	
Neutral White	LZ4-40NW10	
Warm White	LZ4-40WW10	
Dental Blue	LZ4-40DB10	
UV	LZ4-40UA10	

Notes:

1. Click on Emitter Link for emitter data sheet.

## Description

The LZ4-4xxx10 Serially Connected MCPCB option provides a convenient method to mount LedEngin's 10W emitters. The MCPCB connects all four (4) LED die in series and provides 2 Anode and 3 Cathode contact pads. The six recessed features allow the use of M3 or #4 screws to attach the MCPCB to a heat sink. The MCPCB also contains a Zener diode for enhanced ESD protection.

## $R\theta_{J-B}$ Lookup Table

Table 2:

Product	Typical Emitter $R\theta_{J-C}$	+	Typical MCPCB $R\theta_{C-B}$	=	Typical Emitter + MCPCB $R\theta_{J-B}$ <sup>[1]</sup>
10W	2.7°C/W	+	2°C/W	=	4.7°C/W

Note for Table 2:

- $R\theta_{J-B}$  is the combined thermal resistance from the LED die junction to the Aluminum core on MCPCB ( $R\theta_{J-C} + R\theta_{C-B} = R\theta_{J-B}$ ).

## Emitter on Standard MCPCB Dimensions (mm)

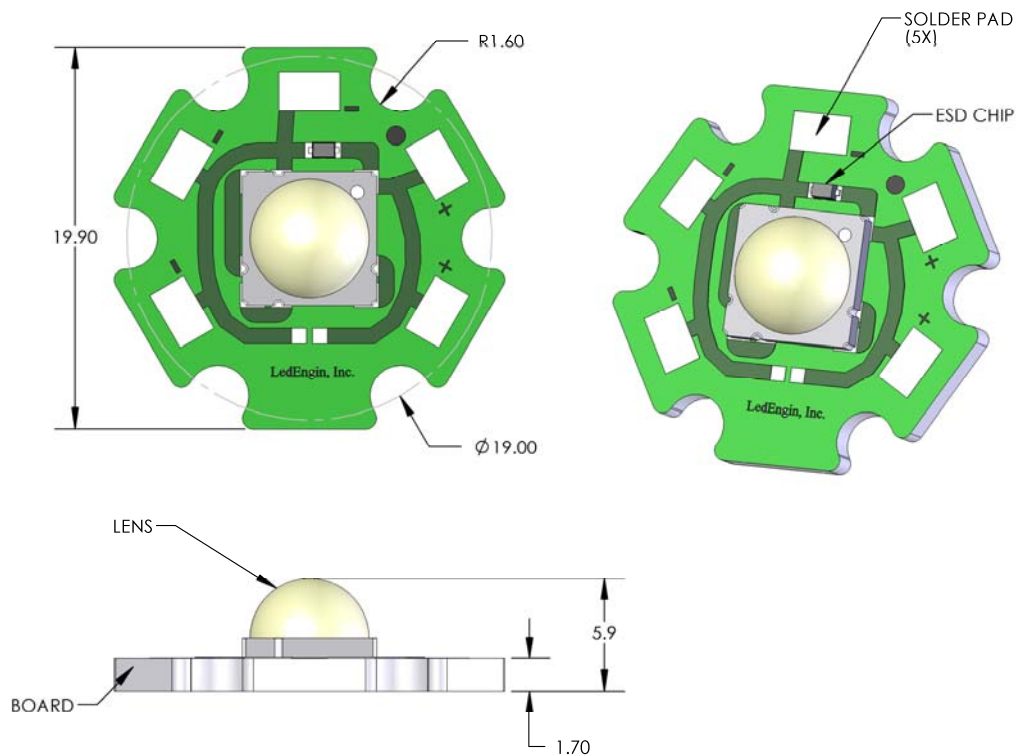


Figure 1: Standard MCPCB outline dimensions (mm).

Note for Figure 1:

- Unless otherwise noted, the tolerance =  $\pm 0.20$  mm.
- Slots in MCPCB are for M3 or #4 mounting screws.
- LedEngin recommends plastic washers to electrically insulate screws from solder pads and electrical traces.
- Electrical connection pads on MCPCB are labeled "+" for Anode and "-" for Cathode.
- LedEngin recommends using thermally conductive tape or adhesives when attaching MCPCB to a heat sink.

## Company Information

The LZ4-4xxx10 LED emitter on MCPCB is developed, manufactured, and marketed by LedEngin, Inc., located in Santa Clara, CA. LedEngin is a global market leader in advanced high-power LED emitters and light-source modules. LedEngin provides total solutions from 3W to 15W in single packages with ultra-small footprints in all colors from Cool White, Warm White, Neutral White, Red, Green, Blue, Amber, RGB, RGBA, Dental Blue and UV. LedEngin supports customers to generate solid-state lighting designs that conserve natural resources. LedEngin is focused on differentiated Ultra High-Brightness LED solutions for diverse global markets using its patent-pending package designs and manufacturing processes. LedEngin offers catalog as well as full custom solutions to enable flexible system designs for its customers. LedEngin is dedicated to long-term win-win partnering with its customers and suppliers.

LedEngin reserves the right to make changes to improve performance without notice.

Please contact [Sales@ledengin.com](mailto:Sales@ledengin.com) or (408) 492-0620 for more information.