





Datasheet

CPL80 Series Passive LED Cooler



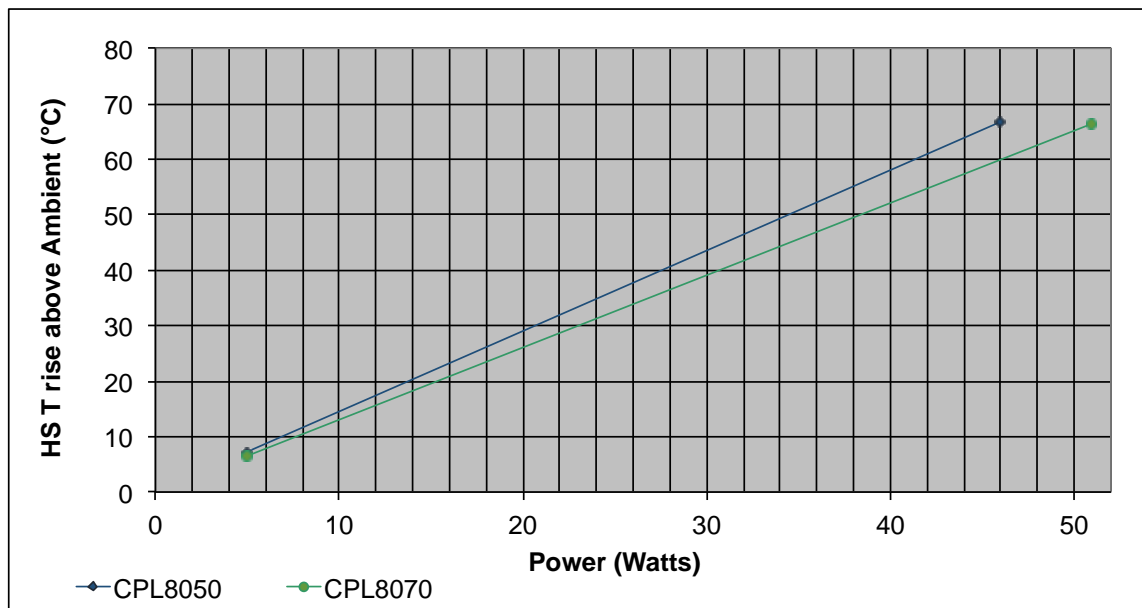
Specify Part Number - CPL8050-101
- CPL8070-101

Features:

-  Solid one piece aluminum construction for maximum thermal conductivity
-  Pin fin design maximizes surface area and provides omni-directional cooling to eliminate concerns about orientation (unlike a linear extrusion)
-  Precision machined flat base ensures consistent contact between the heat sink, interface and LED substrate to maximize heat transfer
-  Standard 10mm thick base allows full recommended depth for mounting holes

| MODEL | DIAMETER mm | HEIGHT mm | BASE THICKNESS mm | WEIGHT g | THERMAL RESISTANCE °C/W | POWER DISSIPATION (watts) | |
|-------------|----------------|--------------|-------------------------|-------------|-------------------------------|---------------------------|------------------|
| | | | | | | 35 °C Ambient | 25 °C Ambient |
| CPL8050-101 | 83 | 50 | 10 | 222 | 1,45 | 34 | 41 |
| CPL8070-101 | 83 | 70 | 10 | 267 | 1,30 | 38 | 46 |

Thermal Performance Chart



Note 1: Power Dissipation calculations are based on a case temperature of 85°C.

Note 2: The power dissipation values are based on dissipating 100% of the electrical power in an LED lighting system. LEDs are becoming increasingly efficient and a significant percentage of the electrical power is converted to light. Accordingly, only 70% to 80% of the electrical power requires thermal dissipation. Efficiencies vary according to the manufacturer, model and CCT of the LED.

To calculate power dissipation capacity of the heat sink for a specific LED, divide the power dissipation values by the LED conversion efficiency of the LED being used. For example, the CPL8050-101 listed above could dissipate 42.5W of power for an LED with a power to light conversion efficiency of 80% at 35°C ambient ($34W/0.8 = 42.5W$).

