## **High Heat Dissipation LED module**

Overheating a high-power LED has a dramatic effect on the chip's lifetime. Common technique is attaching bulky heat sink to the lighting assembly, but this adds significant expense and weight and takes up space. Modifying the PCB upon which the LED is mounted, can improve thermal management but this solution generally is expensive, too. Our solution allows LED has direct contact with aluminum plate, dramatically improved heat dissipation.

Low cost, easy to assemble LED light module for constructing high power LED lamp, ideal for commercial lighting or street light application.



4 x Screwholes 2.78mm diameter

- LED thermal pad is directly soldered on the edge of aluminum plate, excellent heat dissipation: When operating with 1.5A current, LED case temperature is 58C when at 25C ambient temperature. Case temperature is 72C when at 40C ambient temperature.
- There are 3 assembly slots at back of each module, easy to attach to backbone for making a LED lamp. Modules can be inserted at various angles for different light output pattern.
- Light weight construction, each module weights70 grams
- Each module contain 3 Cree LEDs in series, soldered on PCB and metal plate, can be powered with 1.5A DC with voltage roughly 10.5 volt.
- High Luminous efficiency at 87% when case temperature is at 72C.
- One Neutral white module @ 1.5A generates 1260 Luminous Flux(Im)



Example: LED lamp of 8 modules (10,000 lm)

Tim Chen <u>timc@easyledlighting.com</u> (408)-6573989