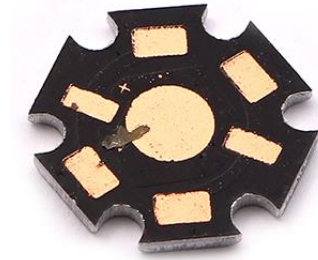


# PCB LED 1W Aluminum Star Board



## **Features:**

- This star board is designed to mount a standard 2-pin LED 1W.  
The aluminum provides a small heatsink for the LED as well as wire attachment points.
- The star board alone does not provide enough heat sink capability to handle the full power of the LED, so it is in turn typically mounted to a larger aluminum plate which acts as a large heatsink. That aluminum plate may have fins and be fan cooled depending on the amount of heat that needs to be dissipated.
- The star board is 20mm across and constructed of 1.2mm thick aluminum with plated copper traces and pads. Solder resist is white. They come in 1 to 5 strips of 5 that is scribed and can be snapped into individual boards as needed.
- The LED solders to the smaller pads observing the polarity markings on the board.  
The larger pads are used to solder wires to, connecting the LEDs in series.
- When soldering the LED to the star board, it is critical to use thermal paste between the body of the LED and the center pad on the star board. This is to ensure efficient heat transfer from the LED to the star board. If using hot air or a hot plate to reflow the solder to mount the LED, it is possible to use solder paste under the LED to solder the LED to the center pad rather than using thermal paste. The solder provides ideal thermal coupling.
- Since the star board is constructed of aluminum and is basically a small heat sink, be sure to use a higher wattage soldering iron with at least a medium size tip for soldering the connections.
- When attaching the star board to an aluminum plate, it can be attached using a thermal epoxy which both bonds the device in place and provides thermal coupling. It can also be attached using a couple of screws in the divots on the side of the star board. When using screws to attach the star board, thermal paste must be used between the star board and the aluminum plate. Ensure that the screw heads do not short out the solder pads by using insulating nylon washers or similar.  
Once the star boards with LEDs are mounted to the aluminum plate, appropriately sized wires can be soldered to the edge pads to connect the LED to other LEDs and to the source driver.

## **Specifications:**

Power	1W
Material	Aluminum
Plating	HASL (SnPb) over copper
Solder Resist	White
Silkscreen	Black
Dimensions	20 x 20mm x 1.2mm

*Made in China*