

Lifetime and output power for LED lights are based on the junction temperature of the high current LED. The junction is the point where the light is generated inside the LED and the point of heat generation. To dissipate heat, Smart Vision Lights directly mounts high current LED's to an aluminum circuit board or backplate (Figure 1). In constant operation the backplate on Smart Vision Lights L300 series and S75 series lights will run at 50 to 60 C° in an ambient temperature of 25 C°. In strobe operation the backplate will run at 25 C° to 40 C° depending on duty cycle.

### STROBE OPERATION

Smart Vision Lights recommends lights to be used in strobe mode for most uniform consistent light. All Smart Vision Lights with built in driver have a temperature compensation circuit that maintains the intensity of light as the temperature of the LED's/light changes.

### CONSTANT OPERATION

Smart Vision Lights recommends additional heat sinking for lights used in constant "on" operation. Mounting the lights backplate to any heat sinking material (metal – aluminum or steel) will increase LED life and stability of light intensity.

#### Strobe Advantages

- Higher uniformity and stable light.
- Little or no HEAT.
- Longer life of LED's

Figure 1. Aluminum Backplate

