

Soldering Conditions and Precautions

Solder no closer than 3mm from the base of the header

Following conditions must be avoided during soldering: overheating, ESD, mechanical shock, vibration, ultrasonic shock, mechanical damage and contamination.

- Only solder to the package leads. Soldering to the LED header or the cap will result in damage to the device.
- If clamping the LED is required, mechanical stress on the LED should be minimized.
- Mechanical stress, shock and vibration must be avoided during soldering.
- Do not mount the LED directly on the PCB or heat sink by soldering directly to the LED header or cap.
- Only use non-corrosive flux.
- Only cut device leads at room temperature using an ESD protected tool. Do not apply stress to the leads while hot.
- Do not apply current to the device until it has cooled down to room temperature after soldering.
- When forming leads, the leads should be bent at a point at least 3mm from the base of the header.
- Form leads prior to soldering.
- Do not use header or can of LED to form leads.

Recommended soldering conditions:

Dip Soldering		Hand Soldering	
Pre-Heat Time	30 seconds, max.	Temperature at Solder Point	190° C
Solder Bath Temperature	190° C	Soldering Time	5 seconds, max.
Dipping Time	5 seconds, max.		

The above table contains the maximum specifications for the soldering conditions. However, it is recommended that soldering always be performed at the lowest possible temperature.

Cleaning

Cleaning with isopropyl alcohol is recommended. Propanol and ethyl alcohol may also be used. DO NOT USE acetone, chloroform, trichloroethylene, or MKS to clean the LEDs.

Do not use ultrasonic cleaners with the LEDs.