

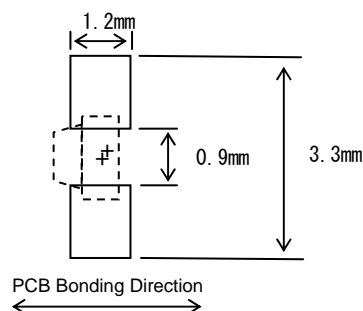
SML-R1* Series

Surface Mount Chip LEDs

This product was developed as a surface mount LED especially suitable for soldering. Please take care of following points when using this device.

1. DESIGNING OF PCB

As for a recommendable solder pattern, Please refer to Fig-1. PCB material or mounting density of other components might affect solderability.



(Fig-1)

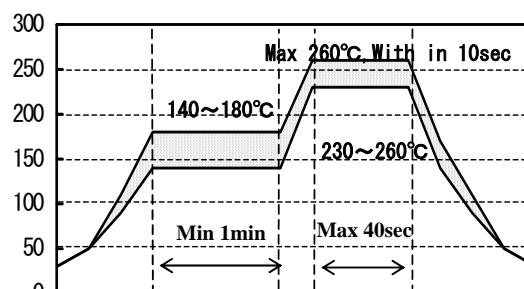
2. SOLDERING (Sn-Cu, Sn-Ag-Cu, Sn-Ag-Bi-Cu)

LED products do not contain reinforcement materials such as glass fillers. Therefore, thermal stress by soldering greatly influence its reliability.

The temperature conditions for reflow soldering should therefore be set up according to the characteristic of this product. (See Fig-2)

Number of reflow process shall be max 2 times and these processes shall be performed in a row.

Cooling process to normal temperature shall be required between first and second soldering process.

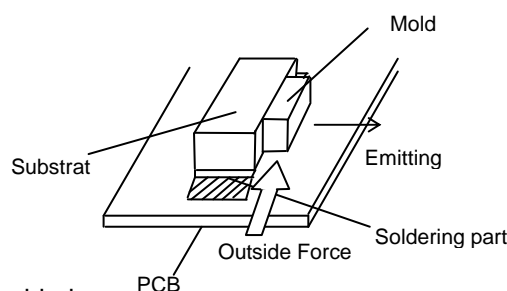


(Fig-2)

3. HANDING AFTER MOUNTING

As shown right drawing, in case outside force of around 700g is given to the device, stress is concentrated to the jointed part between mold resin and substrate. Therefore there is a possibility to break the device or PCB.

Careful handling is needed as ROHM cannot guarantee the falling of the device by outside force after mounting.



4. WASHING

Please note the following points when washing is required after soldering.

5-1) WASHING SOLVENT

Isopropyl alcohol or other alcohol solvent is recommendable.

5-2) TEMPERATURE

Below 30°C, immersion time ; within 3 minutes.

5-3) ULTRA SONIC WASHING

Below 15 / 1 litter of solvent tub.

5-4) COOLING

Below 100°C within 3 minutes.

5. STORAGE

At reflow soldering, the reliability of this product is often influenced by moisture absorption so we apply the packaging with moisture proof for better condition is use, please also note that

6-1) Not to be opened before using.

6-2) To be kept in our moisture proof packaging with some desiccant (SILICA GEL) after opening it.

To be baked in case the SILICA GEL indicator changed its color from either blue to clear or green to pink.

6-3) Please use within 168 hours after the package was opened. (Condition at 30°C, max.70%Rh.)

In case it is not used within 168 hours, please put it back into our packaging.

6-4) BAKING

Please bake under reel condition at 60°C, 12~24 hours (max.20%Rh) after un-sealing.

While baking is done, the reel and emboss tape may be easily deformed.

Please be careful not to give any stress