

1. Soldering

(1) Re-flow soldering

Please mount component on a circuit board by re-flow soldering. Flow soldering is not acceptable.

Recommendable Flux and Solder

| | |
|--------|---|
| Flux | Please use rosin based flux, but do not use water soluble flux. |
| Solder | Please use solder (Sn-3.0Ag-0.5Cu) under the following condition. Standard thickness of soldering paste: 0.10 to 0.15mm |

Recommendable Soldering Profile

| | | |
|------------------|--------------------|------------|
| Pre-heating | 150 to 180°C | 60 to 120s |
| Heating | 220°C min. | 30 to 60s |
| Peak Temperature | upper limit: 260°C | 1s max. |
| | lower limit: 245°C | 5s max. |

Temperature shall be measured on the surface of component.

(2) Soldering with iron

Be compelled to mount component by using soldering iron, please do not directly touch the component with soldering iron. The terminals of component or electrical characteristics may be damaged if excess thermal stress is applied.

Recommendable Soldering with Iron

| | |
|-------------------------------|-------------------------|
| Heating of the soldering iron | 350°C max. |
| Watt | 30W max. |
| Shape of the soldering iron | ø3mm max. |
| Soldering Time | 5s max. at one terminal |
| Solder | Sn-3.0Ag-0.5Cu |

(3) Solder Volume

Please make the solder volume less than the height of the substrate. When exceeding the substrate, the damage of adhesive for sealing between the metal cap and the substrate may occur.

(4) etc.

Do not reuse removed component from a circuit board after soldering.

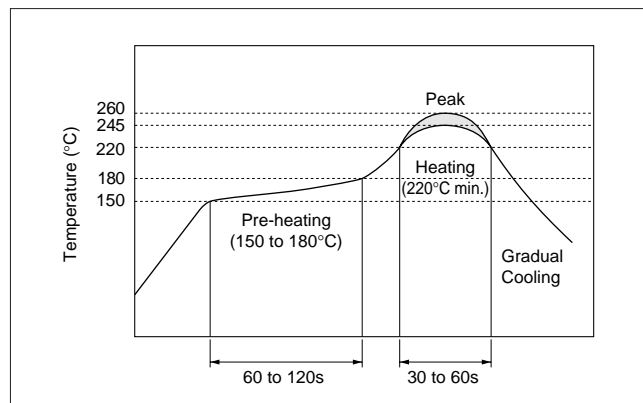
(5) Condition for Placement machines


The component is recommended with placement machines with employ optical placement capabilities. The component might be resulted in damage by excessive mechanical force. Please make sure that you have evaluated by using placement machines before going into mass production. Do not use placement machines which utilize mechanical positioning. Please contact Murata for details beforehand.

2. Wash

(1) Cleaning Solvents

HCFC, Isopropanol, Tap water, Demineralized water, Cleanthrough750H, Pine alpha 100S, Techno care FRW



 Continued from the preceding page.

(2) Temperature Difference : dT *1

dT≤60°C (dT=Component-solvent)

*1 ex. In case the component at +90°C immerses into cleaning solvent at +60°C, then dT=30°C.

(3) Conditions

(a) Ultrasonic Wash

1 minute max. in above solvent at +60°C max.
(Frequency: 28kHz, Output: 20W/l)

(b) Immersion Wash

5 minutes max. in above solvent at +60°C max.

(c) Shower or Rinse Wash

5 minutes max. in above solvent at +60°C max.

(4) Drying

5 minutes max. by air blow at +80°C max.

(5) Others

(a) Total washing time should be within 10 minutes.

(b) The component may be damaged if it is washed with chlorine, petroleum, or alkali cleaning solvent.

3. Coating

Conformal coating of the component is acceptable.

However, the resin material, curing temperature, and other process conditions should be evaluated to confirm stable electrical characteristics are maintained.