

1. Soldering

(1) Re-flow soldering

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

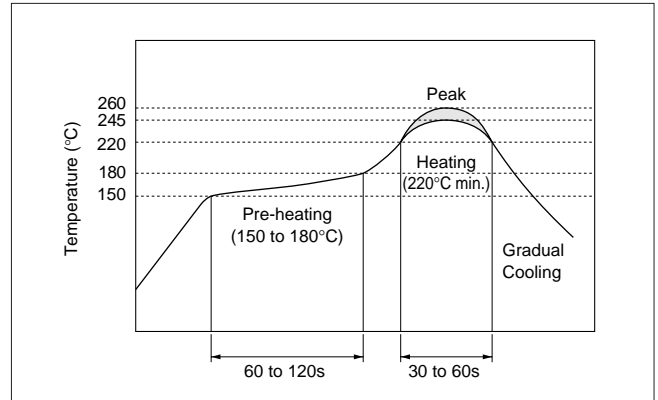
Recommendable Flux and Solder

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) etc.

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

(4) 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

(2) Temperature Difference : dT *1

$dT \leq 60^\circ\text{C}$ ($dT = \text{Component} - \text{solvent}$)

*1 ex. In case the component at $+90^\circ\text{C}$ immerses into cleaning solvent at $+60^\circ\text{C}$, then $dT = 30^\circ\text{C}$.

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(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.