

Notice (Soldering and Mounting)

1. Soldering Condition

Reflow

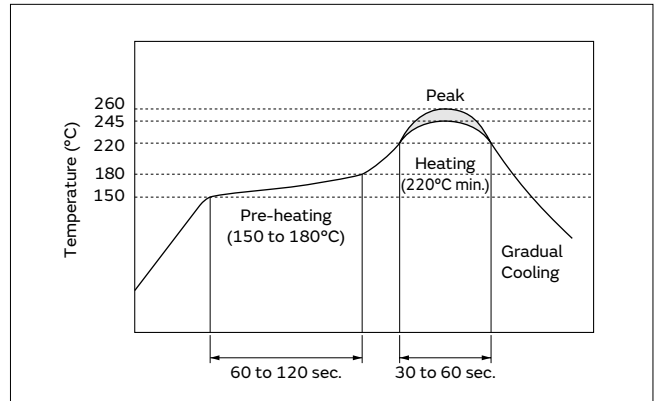
Please mount components on a circuit board by the reflow soldering method.

Flux: Please use rosin based flux; 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

	Condition	
Pre-heating	150 to 180°C	60 to 120 sec.
Heating	220°C min.	30 to 60 sec.
Peak Temperature	245°C min. 260°C max. 10 sec. max.	



2. Notice for Mounting

The component is recommended for placement machines employing optical placement capabilities. The component might be damaged by mechanical force depending on placement machine and condition. Make sure that you have evaluated by using placement

machines before going into mass production. Do not use placement machines employing mechanical positioning. Please contact Murata for details beforehand.

Notice (Storage and Operating Condition)

1. Product Storage Condition

Please store the products in a room where the temperature/humidity is stable and avoid places where there are large temperature changes. Please store the products under the following conditions:

Temperature: -10 to + 40 degrees C

Humidity: 15 to 85% R.H.

2. Expire Date on Storage

Expiration date (shelf life) of the products is six months after delivery under the conditions of a sealed and unopened package. Please use the products within six months after delivery. If you store the products for a long time (more than six months), use carefully because the products may be degraded in solderability and/or rusty. Please confirm solderability and characteristics for the products regularly.

3. Notice on Product Storage

- (1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced in quality, and/or be degraded in solderability due to the storage in a chemical atmosphere.
- (2) Please do not put the products directly on the floor without anything under them to avoid damp places and/or dusty places.
- (3) Please do not store the products in places such as in a damp heated place or any place exposed to direct sunlight or excessive vibration.
- (4) Please use the products immediately after the package is opened, because the characteristics may be reduced in quality, and/or be degraded in solderability due to storage under poor conditions.
- (5) Please do not drop the products to avoid cracking the crystal element.

Notice (Rating)

The component may be damaged if excess mechanical stress is applied.

Notice (Handling)

1. Please confirm the circuit conditions on your set, because irregular or stop oscillation may occur under unmatched circuit conditions.
2. Be sure to provide an appropriate fail-safe function on your product to prevent secondary damage that may be caused by the abnormal

- function or the failure of our product.
3. Please do not use these products in the following applications in transportation equipment: vehicles, trains, ships, etc. (example: engine control, brake control, steering control, body control.)