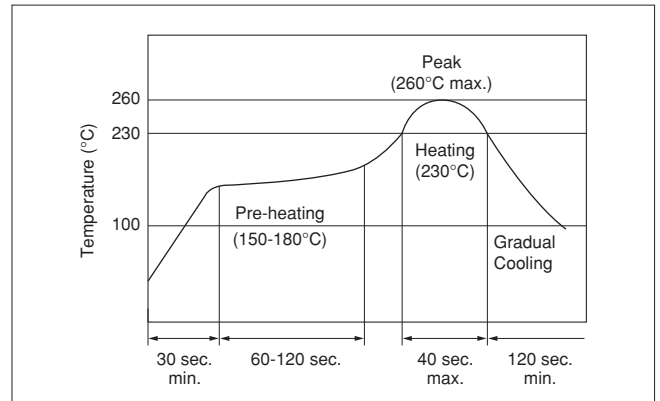


● Soldering and Mounting

1. Standard Reflow Soldering Conditions

(1) Reflow

Filter is soldered twice within the following temperature conditions.



(2) Soldering Iron

Electrode is directly soldered with the tip of soldering iron at $+350\pm 5^{\circ}\text{C}$ for 3.0 ± 0.5 seconds.

(3) Other

Do not use strong acidity flux, more than 0.2wt% chlorine content, in reflow soldering.

2. Wash

(1) Cleaning Solvent

CFC alternatives (HCFC Series), Isopropyl Alcohol (IPA), Water (Demineralized Water), Cleaning Water Solution (Cleanthrough-750H, Pine Alpha 100S), Silicon (Technocare FRW)

(2) Cleaning Conditions


- Immersion Wash
2 minutes max. in above solvent at $+60^{\circ}\text{C}$ max.
- Shower or Rinse Wash
2 minutes max. in above solvent at $+60^{\circ}\text{C}$ max.


(3) Notice

- When components are immersed in solvent, be sure to maintain the temperature of components below the temperature of solvent.
- Please do not use ultrasonic cleaning.
- Total washing time should be 4 minutes maximum.
- Please ensure the component is thoroughly evaluated in your application circuit.
- Please do not use chlorine, petroleum or alkali cleaning solvent.
- If you plan to use any other types of solvents, please consult with Murata or a Murata representative prior to using.

3. Coating

In case of overcoating the component, conditions such as material of resin, cure temperature, and so on should be evaluated well.

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● Storage and Operating Conditions

1. Product Storage Conditions

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°C

Humidity: 15 to 85% R.H.

2. Expiration 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 solderability may be degraded due to storage under poor conditions.

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 quality and solderability may be degraded due to storage in a chemical atmosphere.

● Rating

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

● Handling

1. If the component is cleaned, please confirm that the reliability has not been degraded.
2. The components, packed in a moisture-proof bag (dry pack), are sensitive to moisture. The following treatment is required before applying reflow soldering, to avoid package cracks or reliability degradation caused by thermal stress. When unpacked, store the component in an atmosphere of below 25°C and below 65%R.H., and solder within 48 hours.

(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 a damp heated place or any place exposed to direct sunlight or excessive vibration.

(4) Please use the products immediately after package is opened, because quality and solderability may be degraded due to storage under poor conditions.

(5) To avoid cracking of ceramic element, please do not drop the products.

4. Other

Please be sure to consult with our sales representative or engineer whenever the products are to be used in conditions not listed above.

3. For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.