# ⚠Caution · Notice

## ■ ⚠Caution (Rating)

1. Rated Current

Operating current should not exceed the rated value. Even if operating current is under the rated value, adequate ventilation is required to avoid excessive heat generated within the product (choke coil) and from surrounding heat sources. If exceeding these conditions, excessive heat may cause fumes or permanent damage to the product. Please ensure that product (choke coil) is evaluated and confirmed against the specification when it is mounted in your final assembled product.

-> Winding temperature should be less than 120°C.

Maximum allowable temperature at the surface of coil (Ambient Temperature + Winding Temperature Rise) is in accordance with each safety standard applicable to final assembled product. When the temperature at winding exceeds maximum allowable temperature of safety standard, the rated current should be derated.

2. Inrush Current

Inrush current should not exceed 10 times rated current within 1/4 cycle of 50/60Hz commercial power line. Inrush current should be limited to a minimum of 10 seconds after last inrush.

If these conditions are exceeded, excessive heat may cause fumes or permanent damage to the component, or at worst cause ignition.

## ■ Notice (Soldering and Mounting)

Magnetic Flux Leakage

Choke coils generate small amounts of magnetic flux leakage that may adversely affect equipment operation according to component arrangement.

Testing should be completed on final assembly to ensure equipment performance is not affected.

## ■ Notice (Other)

Coil Humming Noise

Magnetic flux generated between coil and core or between the choke coil windings creates repulsive power between the coil windings. This repulsive power causes the coil winding to vibrate and create a humming noise. The amount of hum produced by the coil is proportionate to the amount of harmonic distortion generated by the operating current. This does not influence the electrical performance of the coils, but it should be considered and tested in actual circuit application.

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## ■ Notice (Storage and Operating Conditions)

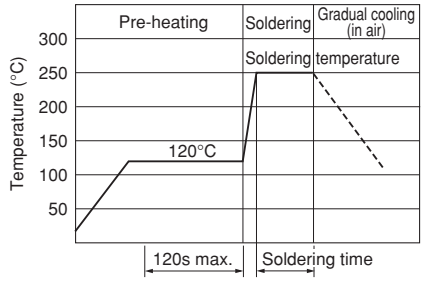
1. Soldering Conditions

(1) Flux, Solder

· Rosin-based flux should be used. Do not use strong acidic flux with halide content exceeding 0.2wt% (chlorine conversion value)

· Use Sn-3.0Ag-0.5Cu solder

(2) Flow soldering profile




| Standard Profile | | Limit Profile | | |
|---|---|---|---|---|
| Sn-3.0Ag-0.5Cu Solder | | | | |
| Soldering temp. | Soldering time | Soldering temp. | Soldering time | Cycle of flow |
| 250±2°C | 4-6s | 265±3°C | 5s | 2 times |

For additional mounting methods, please contact Murata.

2. Cleaning

Avoid cleaning the product due to non-waterproof construction.

3. Storage and Handling Requirements

(1) Storage period

Product should be used within 12 months after receiving. Solderability should be checked if this period is exceeded.

(2) Storage conditions

Storage Temperature: -10 to 40°C

Relative humidity: 30 to 70%

Avoid sudden changes in temperature and humidity.

Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, as it may cause oxidation of lead terminals resulting in poor solderability or corrosion of component windings.

(3) Handling conditions

Care should be taken when transporting or handling the product to avoid excessive vibration or mechanical shock.