## Notice (Handling)

(1) Voltage Balance Control

This product consists of two individual cells. When in use, please be sure to control the voltage of each cell and keep capacitor voltage within operating voltage range (DMF series: 0 to 5.5V, DMT series: 0 to 4.2V, DMH series: 0 to 4.5V). Balance control is needed in order to prevent the excessive voltage (over 1/2 voltage of applied voltage) being applied to either cell. Excessive voltage of either cell may shorten the lifetime of capacitor, distort the capacitor shape or cause electrolyte leakage.

For details, please refer to

https://www.murata.com/en-global/products/capacitor/edlc/techguide/balance

(2) Polarity

This product has polarity. Please do not reverse polarity when in use. Reverse polarity may damage electrolyte or the electrode inside. Please verify the orientation of the capacitor before use in accordance with the Markings of polarity on the product.

(3) Markings

The markings on the device may be erased by rubbing, contact of organic solvent (such as IPA) or removing double sided tape from the capacitor marking area. Please do not rub the marking area. Also, please be careful not to erase markings on the device when using organic solvent or double sided tape.

- (4) Considerations for Operation on AC
  - When using this product on AC, not only the effective voltage but also peak voltage should be within operating voltage range (DMF series: 0 to 5.5V, DMT series: 0 to 4.2V, DMH series: 0 to 4.5V).
- (5) Limited Operating Life (Derating)

The lifetime of this product depends on temperature and voltage condition.

For more details, please refer to

https://www.murata.com/en-global/support/faqs/products/capacitor/edlc/qlty/0007

- (6) Self Heating Temperature
  - When repeating charge and discharge in a short cycle, self heating is generated by internal resistance. The product temperature should not exceed operating temperature range, including any self heating.
- (7) The capacitor package is covered by insulation layer. In some part, however, metal is exposed. Please keep this product from coming in contact with other device or circuit.
- (8) This product cannot be used under any acidic or alkaline environment.
- (9) At extremely low pressure, this product may not be able to provide expected performance. If you would like to use this product at low pressure environment continuously, please consult us first.

## Notice (Soldering and Mounting)

- These parts should not be soldered using re-flow and flow profiles. Please use connection methods that prevent exposure to temperatures beyond the maximum allowable range. These may include hand soldering, etc.
- Please do not apply excessive force to the capacitor during insertion as well as after soldering. Excessive force may result in damage to electrode terminals and/or degradation of electrical performance.
- 3. Hand Soldering

Please solder under the following conditions: Solder Type: Resin flux cored solder wire (ø1.2mm)

Solder: Lead-free solder, Sn-3Ag-0.5Cu Soldering Iron Temperature: 350°C±10°C

Solder Iron Wattage: 70W or less

Soldering Time: 4 sec. per one terminal (DMH series: 3 sec.)

Allowable Soldering Frequencies: 3 times maximum per one terminal

Allowable cumulative soldering time per device: 15 sec. max. total

Please do not touch laminate package directly with the solder iron.

In order to ensure the connectivity, please apply preparatory solder on the land.

When soldering, please apply flux or flux solder, heating the preparatory solder.

4. Please do not wash the device after soldering.

## Notice (Storage and Operating Condition)

- 1. Storage condition without opening outer package:  $30^{\circ}\text{C}$  (room temperature), no more than 60%RH for
  - 1 year (before opening outer package)
    - \*Note: This product cannot be baked.
- 2. Storage conditions after opening outer package:
  - (1) Term of warranty is 3 months after sealed package is opened
  - (2) Storage environment
    Please adhere to the following conditions in sealed package.

Temperature: 5 to 35°C

Humidity: no more than 70%RH with no condensation. Avoid any acidic or alkaline environment.

Avoid excessive external force on this device while in storage.

- (3) Please keep device in sealed package before use
- (4) Please do not apply any heat treatment before use.