

## ⚠ Caution

## ● Rating

Do not use products beyond the rated current and rated voltage as this may create excessive heat and deteriorate the insulation resistance. Be sure to provide an appropriate fail-safe function on your product to prevent a second damage that may be caused by the abnormal function or the failure our product.

## ● Soldering and Mounting

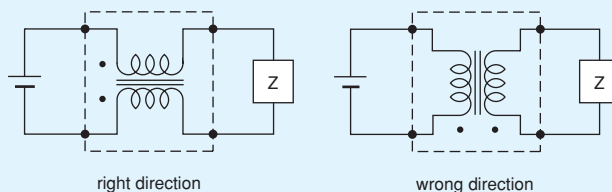
## 1. Self-heating

Please provide special attention when mounting chip common mode choke coils DLW5 series in close proximity to other products that radiate heat.

The heat generated by other products may deteriorate the insulation resistance and cause excessive heat in this component.

## 2. Mounting Direction

Mount Chip Common Mode Choke Coils in right direction. Wrong direction, which is 90 degrees rotated from right direction, causes not only open or short circuit but also flames or other serious trouble.



## Notice

## ● Storage and Operating Conditions

## &lt;Operating Environment&gt;

Do not use products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.

Do not use products in the environment close to the organic solvent.

## &lt;Storage and Handling Requirements&gt;

## 1. Storage Period

DLM11G series should be used within 6 months, the other series should be used within 12 months.

Solderability should be checked if this period is exceeded.

## 2. Storage Conditions

## (1) Storage temperature: -10 to +40°C

Relative humidity: 15 to 85%

Avoid sudden changes in temperature and humidity.

## (2) Do not store products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.

## ● Notice (Soldering and Mounting)

## 1. Cleaning

Failure and degradation of a product are caused by the cleaning method. When you clean in conditions that are not in mounting information, please contact Murata engineering.

## 2. Soldering

Reliability decreases with improper soldering methods. Please solder by the standard soldering conditions shown in mounting information.

## 3. Other

Noise suppression levels resulting from Murata's EMI suppression filters EMIFIL® may vary, depending on the circuits and ICs used, type of noise, mounting pattern, mounting location, and other operating conditions. Be sure to check and confirm in advance the noise suppression effect of each filter, in actual circuits, etc. before applying the filter in a commercial-purpose equipment design.

## ● Handling

## 1. Resin Coating (Except for DLW Series.)

Using resin for coating/molding products may affect the products performance.

So please pay careful attention in selecting resin.

Prior to use, please make the reliability evaluation with the product mounted in your application set.

## 2. Resin Coating (DLW31S Series)

Do not make any resin coating DLW31S series.

The impedance value may change due to high cure-stress of resin to be used for coating/molding products.

An open circuit issue may occur by mechanical stress caused by the resin, amount/cured shape of resin, or operating condition etc. Some resin contains some impurities or chloride possible to generate chlorine by hydrolysis under some operating condition may cause corrosion of wire of coil, leading to open circuit.

So, please pay your careful attention in selecting resin in case of coating/molding the products with the resin.

## 3. Resin Coating (Except DLW31S Series)

The impedance value may change due to high cure-stress of resin to be used for coating/molding products. An open circuit issue may occur by mechanical stress caused by the resin, amount/cured shape of resin, or operating condition etc. Some resin contains some impurities or chloride possible to generate chlorine by hydrolysis under some operating condition may cause corrosion of wire of coil, leading to open circuit.

So, please pay your careful attention in selecting resin in case of coating/molding the products with the resin. Prior to use the coating resin, please make sure no reliability issue is observed by evaluating products mounted on your board.

#### 4. Caution for Use (DLW Series)

When you hold products with a tweezer, please hold by the sides. Sharp materials, such as a pair of tweezers, should not touch the winding portion to prevent breaking the wire. Mechanical shock should not be applied to the products mounted on the board to prevent breaking the core.

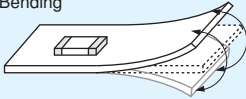
#### 5. Brushing

When you clean the neighborhood of products such as connector pins, bristles of cleaning brush shall not be touched to the winding portion of this product to prevent the breaking of wire.

#### 6. Handling of a Substrate

After mounting products on a substrate, do not apply any stress to the product caused by bending or twisting to the substrate when cropping the substrate, inserting and removing a connector from the substrate or tightening screw to the substrate. Excessive mechanical stress may cause cracking in the Product.

Bending



Twisting

