



Precautions for use of Chip Mica Capacitors

If abnormalities generate this product according to the circumference conditions (the use material in design apparatus, environment, circuit conditions, etc.) of a capacitor when use is carried out, when the worst, there is fear, such as short-circuit of a product, opening, emitting smoke, and ignition. Please use it after checking the contents, since I indicate notes on use of this product.

In addition, when there is a question about the matter which is not indicated, please consult to the sales department of our company.

When mounting a capacitor, if you touch the terminal part directly with your hand, be sure to discharge the capacitor before touching it, as there is a risk of electric shock due to the charge accumulated in the capacitor.

1. Operating temperature range

Please use a product so that ambient temperature + self-exothermic temperature does not exceed the operating temperature range. Keep in mind it not only contracts the life of the product itself, but that the physical properties of a dielectric change, it causes the remarkable fall of capacitance, dissipation factor, etc., and there is danger of emitting smoke and ignition when it is used exceeding an operating temperature enough.

2. Internal generation of heat

When using it for AC use, internal generation of heat arises by electric power loss. Calorific value is influenced by circumference temperature, heat dissipation conditions, radiation, heat conduction, etc.

Therefore, when doubtful, we recommend you that I have the employment experiment by the system conducted. In addition, please carry out to the following points carefully in the case of an experiment.

① We recommend you to perform an examination in not temporary construction but the completion article of a design, or a mass-production article.

② Please perform measurement of generation of heat in the state of a heat balance (state where temperature will not rise).

3. Operating voltage

① The definition about voltage is divided roughly into examination voltage and rated voltage. Examination voltage is voltage which a short-time capacitor bears extremely, and rated voltage is the voltage which can be equal to continuation use in operating temperature within the limits. (Voltage which does not exceed the operating temperature range even if it continues impressing voltage)

② When using it by AC, if a certain voltage more than fixed is impressed, corona electric discharge will occur (partial electric discharge), and if it is used as it is, there is a danger of resulting in insulated destruction. Therefore, when used in alternating current, it is necessary to reduce the voltage separately from the rated voltage. (Please refer to the voltage reduction curve in the product catalog.)

4. Usage environment

Chip Mica capacitors cannot be used as DC capacitors. and please avoid the use in the high temperature high humidity.

5. Cautions at circuit board mounting

Be sure to minimize the warping and twisting of the circuit board after our product is mounted.

When the mounted circuit board is attached to some housing without assuring the flatness, our product will be exposed to mechanical stress. And this may result in the physical damage to our product and failure of the whole system in worst case.

6. Storage conditions

① The storage environment should be within a temperature of 0~40° C and a relative humidity of 60%, and should be sealed in a cool and dark place.

② Please use the product within 6 months of delivery as much as possible. If it exceeds 6 months, please check the solderability before use.

③ If you want to store the opened item as inventory again, add the drying material and re-seal it.

7. Other precautions

① If you are considering using it in an application that requires extremely high reliability, please contact our sales office in advance.

② Chip Mica capacitors meets a RoHS order. Chip Mica capacitors includes the lead compound that an exclusion object is handled in the product inside by a RoHS order.

③ Since abandonment of a product and packing material has the law and regulations which it defined that the discharge contractor himself processed proper, please observe those laws.

④ Please note that specifications, materials, and other contents described in the catalog may be changed without prior notice.

⑤ We shall be free from any responsibility against the failure caused by the usage, deviating from the contents described in this precaution.