



Aluminum Electrolytic Capacitors

General Information For Application

The following cautions must be observed when using electrolytic capacitors

1. Polarity:

DC electrolytic capacitors are polarized. If used in reverse polarity, the circuit life may be damaged.

For usage on circuits whose polarity is occasionally reversed or whose polarity is unknown, use non-polar capacitors.

2. Operating Voltage:

Do not apply a voltage exceeding the capacitor's rated voltage. Otherwise, the capacitors may be damaged as leakage current increases.

3. Ripple Current:

The ripple current on the capacitors should be at or below permissible level. Do not allow the current to pass the capacitors in excess of the specified ripple current.

4. Operating Temperature:

The capacitors should not be used in other than the guaranteed temperature range. Usage at room temperature will ensure long life.

5. Leakage Current:

The leakage current shall be within specified levels. When capacitors are at a lower voltage, the actual leakage current will be reduced proportionately.

6. Safety Vent:

Case diameters of 6.3mm and larger for Radial types are designed with case venting, and case diameters of 8mm and larger for Axial types are designed with safety vent on rubber bung.

7. Soldering:

(A) Be careful of temperature and time when soldering. Dip or flow soldering of the capacitors should be limited to less than 260°C and 10 seconds.

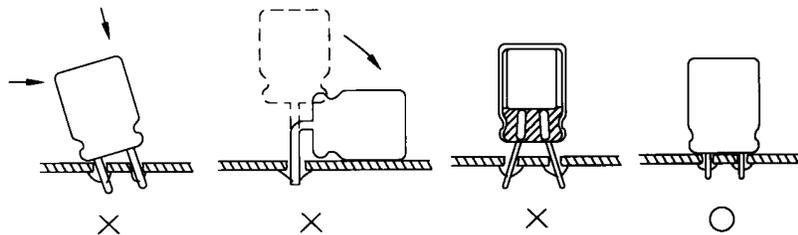
(B) High levels of humidity will affect the solderability of lead wire and terminals. High temperature will reduce long term operating life.

(C) Following defective soldering affect the internal characteristics, such as increasing leakage current, short circuit, broken or wound of lead wires, and leaking electrolyte.

(1.) Parts slant to the board after soldering.

(2.) Leads are greatly bent after soldering.

(3.) Lead space on board differs from the original.



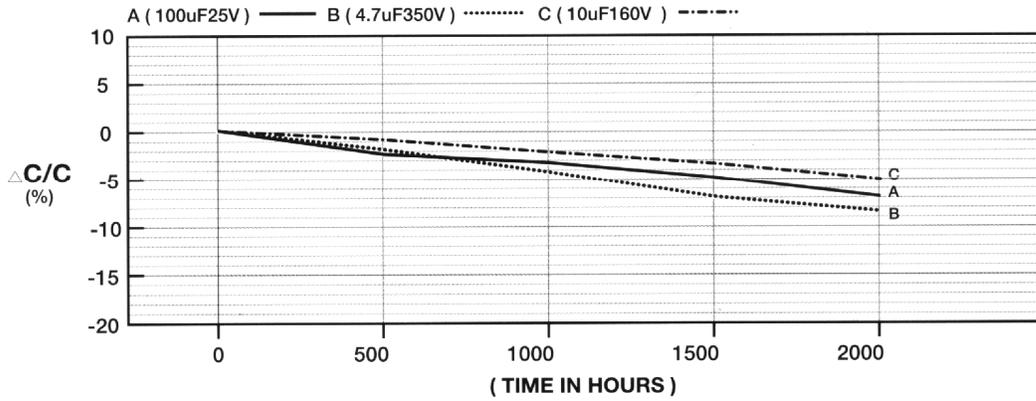
Additional Instructions:

1. After removing capacitors from long-duration storage, aging should be conducted at the rated working voltage before application, due to increase leakage and decrease of voltage.
2. The electrolytic capacitor is not suitable for circuits in which charge and discharge are frequently repeated, otherwise the capacitance value may drop, or the capacitor may be damaged.
3. Do not apply excessive force to the lead wires or terminals, otherwise they may be broken or their connections with the internal elements may be affected.
4. Capacitors will be affected adversely by some solvents. Before using any solvents, please consult with RGA engineers.
5. Any change and modification on case size and other standard specifications in this catalog may be adopted without notice.

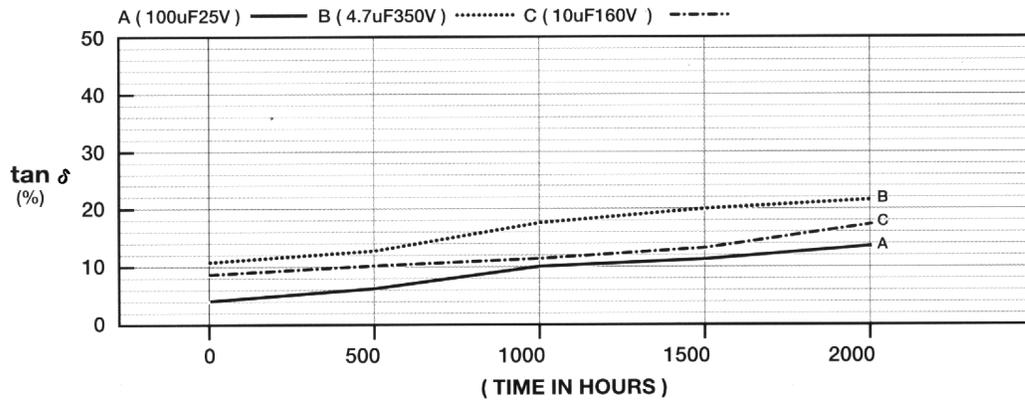
Aluminum Electrolytic Capacitors



Capacitance Change Ratio



Dissipation Factor Change



Leakage Current Change

