

Storage of SMT Aluminum Electrolytic Capacitors

If you leave surface mount aluminum electrolytic capacitors without voltage for a long period of time, the oxide film on the anode foil can deteriorate which will result in higher than specified leakage current when voltage is applied. However, applying voltage causes a reaction between the electrolyte and the aluminum foil, which can repair the deteriorated parts of the oxide film. Unless the capacitor has been permanently damaged, this will usually result in a return of the leakage current to the low levels that were initially specified.

The standard storage conditions are shown below. In the situation where the storage period has been exceeded, we recommend applying voltage (rated voltage for 30 minutes with a protective series resistance of 1000 ohms) or conducting aging after mounting on a printed circuit board before using the capacitors. When performing aging, the voltage should be increased gradually and the leakage current monitored to insure that the maximum rated leakage current is not exceeded.

Shelf life of SMT aluminum electrolytic capacitors

Storage period: 3 years

Storage conditions:

- Normal temperature and humidity
Temp. : 5°C to 35°C (Note: There is no problem with a storage condition of below 5°C.)
Humidity: 45 to 85%RH
- Store in a location without direct sunlight.
- Packing Material: Pack the capacitors in a cardboard box or a plastic bag.

The shelf life stated above is given in terms of electrical characteristics. The solderability of the leads will also be satisfactory within this shelf life.