

Storage of capacitors

Aluminum electrolytic capacitors

Storing aluminum electrolytic capacitors at high temperatures or in direct sunlight will cause the electrolyte within the capacitor to evaporate through the rubber end seals. The loss of electrolyte through accelerated evaporation causes the capacitance to decrease and increases in the dissipation factor, ESR and leakage current. The life expectancy of the capacitors will also be decreased. The solderability of the capacitors can also be compromised.

Do not store aluminum electrolytic capacitors in wet or humid conditions or outdoors. Storing capacitors in moist conditions can corrode the lead wires which can prevent the capacitors from soldering properly.

Storage in oil, ultraviolet ray, ozone and radiation will cause the deterioration of the rubber end seals causing the capacitors end seals weaken resulting in the reliability of the capacitors to be compromised.

Storing aluminum electrolytic capacitors should be between +5°C and +40°C with 75% relative humidity and indoors.

Storing aluminum electrolytic capacitors should also be limited to 2 years after which time the capacitors should be checked for compliance to specifications. If the capacitors have any specification out of specification the capacitors can be reconditioned. After reconditioning the capacitors can be stored up to 2 additional years. Capacitors that have been stored for over 2 years after reconditioning should be scrapped and new parts should be used.

Film capacitors

Film capacitors like aluminum electrolytic capacitors should be stored under controlled conditions to prevent any deterioration of the capacitors. Film capacitors should be stored in similar conditions to aluminum electrolytic capacitors except film capacitors can be stored for many years before they will drift out of specifications.