

Leakage current behaviour at voltage-free storage / Forming

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Leakage current behaviour at voltage-free storage	The dielectric material of aluminium electrolytic capacitors can be damaged during voltage-free storage especially in temperatures exceeding 40°C. For a further apply to voltage a higher leakage current will result. Aluminium electrolytic capacitors can be stored at least
	two years and photoflash capacitors at least four month at a temperature below 40°C. This does not decrease the reliability.
	After storage of the aluminium capacitors for more than two years or for photoflash capacitors more than four month it is critical, whether the circuit will tolerate high initial leakage current. A circuit with capacitors can cause a high leakage current. It should be operated undisturbed for one hour without load current. This usually regenerates the capacitor. The storage can be continued.
Forming	According to IEC 60384-4 the capacitors need to be formed before the electrical measurements are made. This leads to comparable results.
	The capacitors are applied to the nominal voltage via a resistor for one hour. The resistor is 100Ω for $U_N \le 100V$ and $1k\Omega$ for $U_N > 100V$.
	After this the capacitors have to be stored 12 to 48 h without current at room temperature. At the latest 48 h after this the leakage current has to be measured.
	If the capacitor already meets the conditions for the leakage current, the forming of the capacitor can be omitted.