

SOLDERING OF ALUMINUM ELECTROLYTIC CAPACITORS

Hand Soldering (Soldering Iron)

When using a soldering iron to mount aluminum electrolytic capacitors, exposure should be limited to 10 seconds at 260°C or 3 seconds at 350°C.

When removing capacitors from a printed circuit board, pull gently on the capacitor only after the solder is melted sufficiently.

At no time should the soldering iron touch the capacitor body. Touching the body of the capacitor can cause the sleeving to crack or damage.

Wave Soldering

Aluminum electrolytic capacitors are not to be immersed in solder bath. To do so would result in the capacitor's internal pressure increasing and damage to the capacitor would result. Therefore, aluminum electrolytic capacitors are to be mounted on the topside of the circuit board and only the bottom side of the circuit board should be exposed to the solder bath.

The solder bath's temperature should be limited to 260°C with an exposure time of 10 seconds. The preheat should be limited to +125°C for 30 seconds.

Care is to be taken to prevent heat-conducting components like resistors or ceramic components from touching or near the capacitors to prevent the solder heat conducted through these components from the capacitor's outer sleeve.

Reflow Soldering (For Chip Type Aluminum Electrolytic Capacitors)

Surface mount capacitors can only be exposed to reflow soldering processes. For recommended reflow soldering profile, please see technical paper titled "Lead Free Reflow Soldering Conditions".

Through hole capacitors are not to be used in reflow soldering processes.