

Precautions for Soldering I

When lithium batteries (with terminals for soldering) are soldered to a PC board, over heat by soldering may cause the battery to have damage on the sealing gasket which poses electrolyte leakage. To prevent such a problem, please refer precautions as follows:

Precautions for Soldering

1. Do not use reflow soldering

Reflow soldering heats the battery to extremely high temperature, and it causes electrolyte leakage, lower performance, or in the worst case, explosion or catching fire. Please do not solder by reflow.

2. Tab terminal soldering with a soldering iron:

Please keep the soldering iron not to touch the battery body directly. The temperature of the soldering iron should be around 350°C, and should be done by within 5 seconds. Please beware the battery surface does not exceed the specified temperature range in this specification during the process.

3. Solder bath, Dip soldering, Flow soldering, Wave soldering:

Solder bath, Dip soldering, Flow soldering, Wave soldering are available to attach tab terminal attached batteries on the PCB. However, the battery surface temperature must be kept equal of less than the specified maximum temperature in this specification during the whole process.

Basic Condition	
Temp of soldering bath	≤ 260°C
Dipping time	≤ 5 sec.
Number of times	2 times as maximum

(If the battery temperature is expected to exceed the specified maximum temperature, please consult us.)

Other cautions

- Please do not solder directly on the battery body.
- Please consider to use high temperature coin battery models in case of the temperature condition is sever for normal coin battery models.

Gasket and separator used for lithium batteries are made of plastics which have low softening temperature. Also, the electrolyte is organic solvent having low boiling point. Therefore, if the battery is heated beyond a certain threshold, deteriorated performance, electrolyte leakage, and explosion or catching fire because of excessive inner pressure may happen.

Please share those precautions among all relevant parties/departments including manufacturing and sales department or subcontractors.

For more information, please contact the sales department in charge.