

Notice for Thin cell

1 Notice for Designing Battery Pack

电池外壳设计注意事项

1.1 Package Design

外壳设计

- ① The battery pack should have sufficient strength and the battery should be protected from mechanical shock.
- ② No sharp objects should be inside the pack containing the battery.
- ① 电池外壳应有足够的机械强度以确保其内部电芯免受机械伤害。
- ② 外壳内安装电芯的部位不应有锋利的边角。

2 Notice for Assembling Battery Pack

电池外壳组装注意事项

2.1 Tab connection

电芯的连接

- ① Ultrasonic welding or spot welding is recommended to connect the battery with the PCM or other parts.
- ② If the tab is to be soldered to the PCM, the instructions below are very important to ensure battery performance.
 - a) The solder iron should be temperature controlled and ESD safe.
 - b) Soldering temperature should not exceed $350 \pm 10^\circ\text{C}$.
 - c) Soldering time should not be longer than 3 seconds.
 - d) Soldering times should not be fewer than 5.
 - e) Let the battery tab cool down before soldering again.
- ① 建议使用超声波焊接或点焊技术来连接电芯与保护电路模块或其它部分。
- ② 如使用手工锡焊，须注意以下事项，以保证电芯的功能：
 - a) 烙铁的温度可控且防静电。
 - b) 烙铁的温度不能超过 $350 \pm 10^\circ\text{C}$ 。
 - c) 锡焊时间不能超过 3 秒；
 - d) 锡焊次数不能超过 5 次；
 - e) 必须在极耳金属片冷却后再进行二次焊接；

2.2 Cell fixing

电芯的安装

- ① The cell should be fixed to the battery pack by its large surface area.
- ② There should be no sharp edges at the assembly contact area.
- ③ Cells must be held firmly in the battery pack; movement is not allowed.
- ④ The total thickness (the cell thickness plus the thickness of auxiliary materials, e.g. sponge pad, insulate pad, tape and so on) can't exceed the interior room of the plastic case, in order to prevent the cell from the damage and safe issue.
- ① 应将电芯的宽面安装在外壳内；
- ② 装电芯的位置不能有毛刺和尖锐边角；
- ③ 电芯不能在壳内活动。
- ④ 电芯的厚度与辅助材料(如：海面垫、绝缘片、胶带等)的总厚度不能大于壳体内部空间尺寸，以免造成对电芯的损坏和安全隐患。

Warning and Cautions 警告及注意事项

Danger warning (it should be described in manual or instruction for users, indicated especially) to prevent the possibility of the battery from leaking, heating, explosion. Please observe the following precautions:

危险警告：（应在使用说明手册或说明书中，特别注明）为防止电池可能发生泄漏，发热，爆炸，请注意以下预防措施：

- ◆ Don't immerse the battery in water and seawater. Please put it in cool and dry environment if no using.
严禁将电池浸入海水或水中，保存不用时，应放置在阴凉干燥的环境中。
- ◆ Do not discard or leave the battery near a heat source as fire or heater
禁止将电池在热高温源（如火、加热器）旁等使用、留置或丢入。
- ◆ Don't reverse the positive and negative terminals
严禁颠倒正负极使用电池。
- ◆ Don't connect the positive and negative terminal directly with metal objects such as wire. Short terminals of battery is strictly prohibited, it may damage battery.
禁止用金属直接连接电池正负极短路，任何时候禁止短路电芯，它会导致电芯严重损坏。
- ◆ Do not transport and store the battery together with metal objects such as necklaces, hairpins.
禁止将电池与金属，如发夹，项链等一起运输或贮存。
- ◆ Do not strike , throw or trample the battery.
禁止敲击或抛掷，踩踏电池等。
- ◆ Do not directly solder the battery and pierce the battery with a nail or other sharp object
禁止直接焊接电池和用钉子或其它利器刺穿电池。
- ◆ Prohibition of use of damaged cells
禁止使用已损坏的电芯
- ◆ Don't bend or fold sealing edge. Don't open or deform folding edge Don't fillet the end of the folding edge
禁止弯折顶封边，禁止打开或破坏折边，禁止折电芯折边底部
- ◆ Don't fall, hit, bend battery body.
禁止坠落、冲击、弯折电芯。
- ◆ Battery pack designing and packing Prohibition injury batteries.
电池外壳设计和包装禁止损伤电池。
- ◆ Never disassemble the cells
在任何情况下不得拆卸电芯
- ◆ The battery replacement shall be done only by either cells supplier or device supplier and never be done by the user.
更换电芯应由电芯供应商或设备供应商完成，用户不得自行更换。
- ◆ Keep the battery away from babies.

电池应远离小孩。

Caution 小心

- ◆ Do not use or leave the battery at very high temperature conditions (for example, strong direct sunlight or a vehicle in extremely hot conditions). Otherwise, it can overheat or fire or its performance will be degenerate and its service life will be decreased.

禁止在高温下（直热的阳光下或很热的汽车中）使用或放置电池，否则可能会引起电池过热，起火或功能失效，寿命减短。

- ◆ Do not use it in a location where is electrostatic and magnetic greatly, otherwise, the safety devices may be damaged, causing hidden trouble of safety.

禁止在强静电和强磁场的地方使用，否则易破坏电池安全保护装置，带来不安全的隐患。

- ◆ If the battery leaks, and the electrolyte get into the eyes. Do not wipe eyes, instead, rinse the eyes with clean running water, and immediately seek medical attention. Otherwise, eyes injury can result.

如果电池发生泄漏，电解液进入眼睛，请不要揉擦，应用清水冲洗眼睛，并立即送医治疗，否则会伤害眼睛。

- ◆ If the battery gives off an odor, generates heat, becomes discolored or deformed, or in any way appear abnormal during use, or storage, immediately remove it from the device and stop using it.

如果电池发出异味，发热，变色，变形或贮存，使用过程中出现任何异常现象，立即将电池从装置中移离并停用。

- ◆ In case the battery terminals are dirt, clean the terminals with a dry cloth before use. Otherwise power failure or charge failure may occur due to the poor connection with the instrument.

如果电池弄脏，使用前应用干布抹净，否则可能会导致接触不良功能失效。