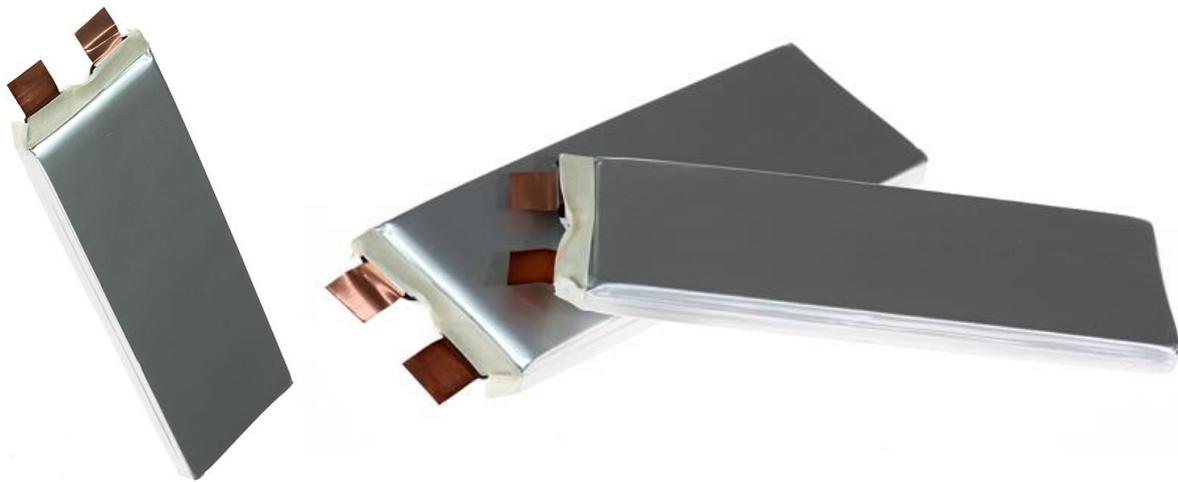


## Technical specification

# GB-LPO-010AHP 3,7V 9 Ah 5C

Li-Ion Polymer Rechargeable Battery



Item	Specifications	Remark
Nominal Capacity	9000 mAh±5%	5C discharge, 25°C
Nominal Voltage	3.70 V	Average Voltage at 0.2C discharge current
Standard Charge Current	0.2 C	Working temperature : 0~45°C
Max Charge Current	1 C	Working temperature : 0~45°C
Charge cut-off Voltage	4.2 V	CC/CV
Discharge Current	Continuously: 5 C ; Max : 10 C	Working temperature : -20~60°C
Discharge cut-off Voltage	3.00 V	
Cell Voltage	3.7 - 3.9V	When leave factory
Impedance	≤5 mΩ	AC 1KHz after 50% charge,25°C
Weight	Approx: 214g	
Storage temperature	≤1month	-10 ~ 45 °C
	≤3month	0 ~ 30 °C
	≤6month	20±5 °C
Storage humidity	65 ± 20 % RH	

## **Cautions of charge & discharge**

Charging current should be lower than values that recommend below. Higher current and voltage charging may cause damage to cell electrical, mechanical, safety performance and could lead heat generation or leakage.

1. Batteries charger should charging with constant current and constant voltage mode;
2. Charging current should be lower than or equal to 1C
3. Temperature 0~45°C is preferred when charging;
4. Charging voltage must be lower than 4.2V.

## **Discharge**

1. Discharging current must be lower than (or equal to ) 5 C;
2. Temperature -20~60°C is preferred when discharging;
3. Discharging voltage must not be lower than 3.00V.

## **Over-discharge**

It should be noted that the cell would be at an over-discharge state by its self-discharge. In order to prevent over-discharge, the cell shall be charged periodically to keeping voltage between 3.7-3.9V. Over-discharge may cause loss of cell performance. It should be noted that the cell would not discharge till voltage lower than 3.00V.

## **Storage of polymer lithium-ion batteries**

- The environment of long-time storage:
- Temperature: 20±5°C;
- Humidity: 45-85%;
- Batteries were 40~60% charged.

In case of over-discharge, batteries should be charged for one time every 3 months while storing. Batteries should be discharged and charged after being stored more than a year in order to activate it and restore energy. Please charge the battery with constant current 0.5C for 1 hour so that it has some storage of charge for properly using. Charge and discharge afresh to active and renew battery energy after storage above 1 year.

## **Transportation of polymer lithium-ion batteries**

The batteries should transportation with 10~50% charged states.

## Notice of Designing Battery Pack

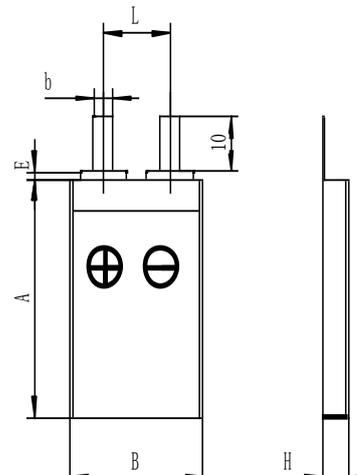
Ultrasonic welding or spot welding is recommended to connect battery with PCM or other parts.

If apply manual solder method to connect tab with PCM, the notice below is very important to ensure battery performance.

1. The electric iron should be temperature controlled and ESD safe;
2. Soldering temperature should not exceed 350°C;
3. Soldering time should not be longer than 3s, keep battery tab cold down before next soldering;
4. Soldering times should not exceed 5 times;
5. Directly heat cell body is strictly prohibited, battery may be damaged by heat above approx. 100°C.

## Dimensions:

Sign	Item	Max (mm)
A	Length	157.5
B	Width	59.5
H	Thickness	9.9
b	Tab Width	15



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