

Customer name:

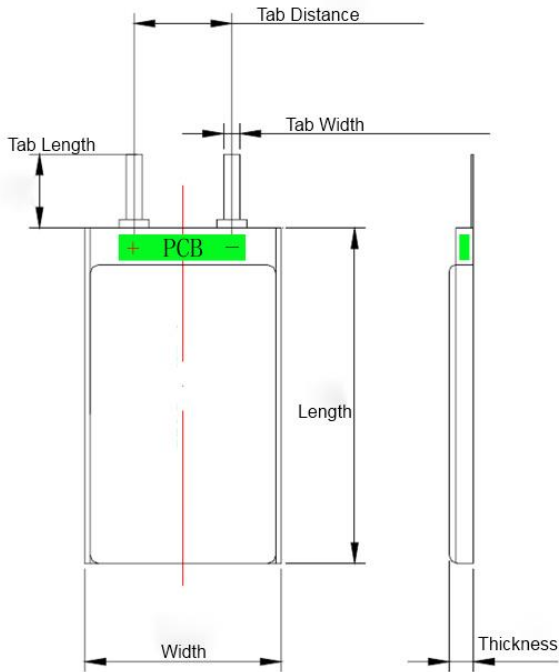
## Lithium-Ion Polymer Battery

### LP582235 *Brief Datasheet*

#### Basic Specification

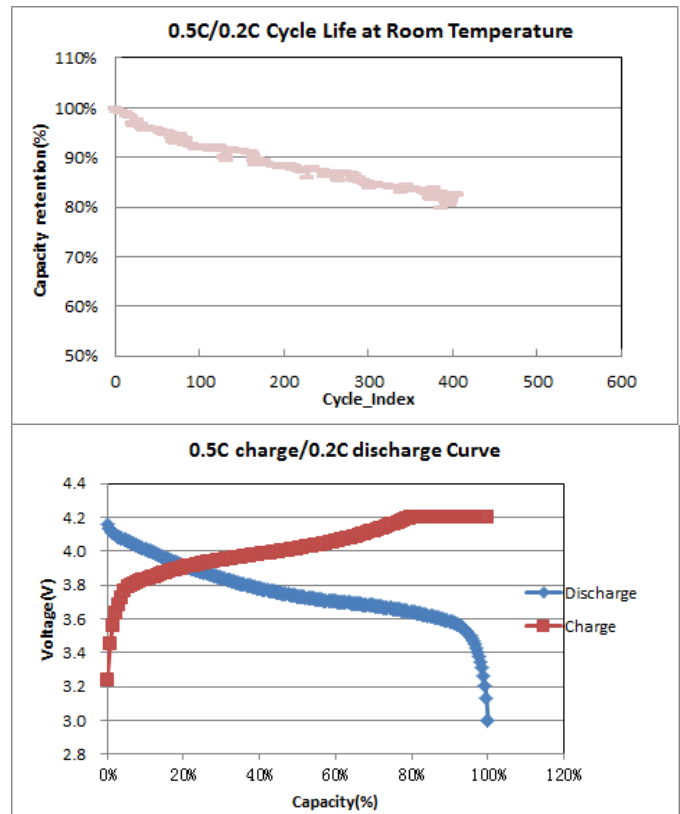
NO.	Item	Specification	Remark
1	Model	LP582235	
2	Weight	7.4 ± 0.2g	
3	Nominal Voltage	3.7V	
4	Full Charged Voltage	4.2V	
5	Cut-off Voltage	3.0V	
6	Operating Temperature	Charging: 0°C ~ 45°C Discharging: -20°C ~ 60°C	
7	Nominal Capacity	380mAh	Measured at 0.2C
8	Maximum Impedance	< 80mΩ	1000Hz AC
9	Charge Current	Standard: 0.5C Rapid: 1.0C	0.01C cut-off current
10	Charge Time	Standard: 3 hours Rapid: 2 hours	Approximately
11	Discharge Current	Standard: 0.2C Maximum: 1.5C	
12	Storage Temperature	Less than 1 month: -20°C ~ 60°C Less than 3 months: -20°C ~ 40°C Less than 1 year: -20°C ~ 25°C	Percentage of recoverable capacity more than 80%
13	Dimension	Thickness: 5.8 ± 0.2 Width: 22 ± 0.5 Length: 35 ± 0.5	
14	PCM	309A	

## Drawing and Performance



### Note:

- Regarding to Charging, first CC(constant current) charge the battery to 4.2V, then supply a decreased current to make the battery CV(constant voltage) until the current has been reduced to 0.01C.
- Cycle life performance is utterly depended on the chemical design based on customer's different requirements. Please contact Autec for further information.
- The tab dimension is just for reference. Autec can do custom tab length, tab width and tab distance based on customer's requirements.



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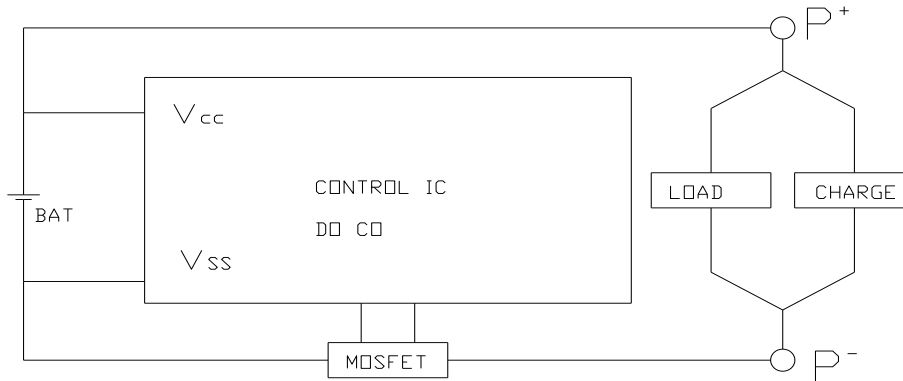
## PCM Specification

Item	Test Condition
Over charge protection	The battery should be charged under 4.325V/1C. The charging should be shut off when the internal cell voltage becomes more than the specified protection voltage.
Over discharge protection	The battery should be discharged with 1C, The discharging should be shut off when the internal cell voltage becomes less than the specified protection voltage.
Short protection	After rated charge, (+) and (-) terminals are connected with 10m mental resistor or equivalence.

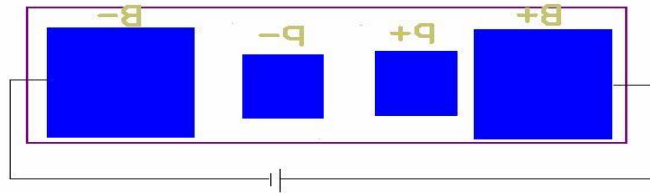
## PCM Standard

Symbol	Name	MIN.	TYP.	MAX.	Unit
VDET1	Over-Charge detect voltage	4.30	4.325	4.35	V
VDET2	Over-discharge detect voltage	2.45	2.475	2.5	V
IDD	Supply current	3	--	6	μA
I <sub>STANDBY</sub>	Standby current	--	--	0.2	μA

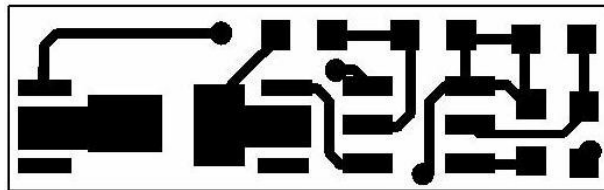
### Schematic diagram



### Top overlay



### Bottom overlay



### PCB-BOM\*

SPEC	NAME	QTY	REMARK
S-G2J*	CONTROL IC	1	U1
FDW9926A	MOSFET	1	U2

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470Ω(0603)	RESISTANCE	1	R1
2.0kΩ(0603)	RESISTANCE	1	R2
0.1uF (0603)	CAPACITOR	1	C1

\* Possibly be substituted by other model IC

\* Lead-free

## Warranty Period

The warranty period of battery is a 12 months from the date of shipment. However, even though the problem occurs within this period, Autech won't replace a new battery for free as long as the problem is not due to the failure of our manufacturing process or is due to customer's abuse or misuse.