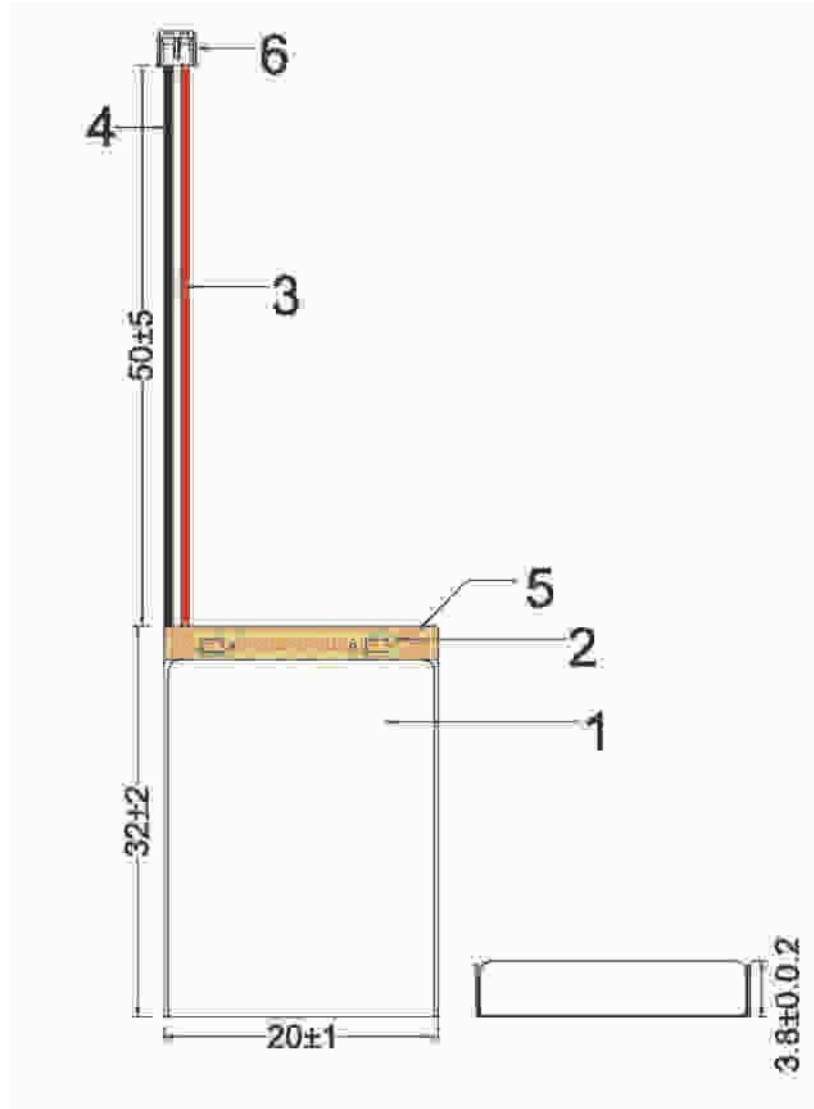


This document describes the Product Specification of the Lithium Polymer rechargeable battery

2. Battery configuration.

2.1 Model.: AP 382030 3.7V 170mAh 1S1P with Safety Circuit

2.2 Assembly Drawing:



NO.	NAME	QTY	NOTE
1	Cell	1	AP 382030
2	PCM	1	PW-308B
3	Positive Wire	1	UL1571 26# AWG (Red)
4	Wire	1	UL1571 26# AWG (Black)
5	Tape	1	High temperture resistant
6	Connector	1	JST _SHR-02V-SB and JST _SSH-003T-P0-2-H

Note:

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All Data contained herein is for single cells. For battery applications, performance data may vary from single cell data, depending on specific battery configuration

3. Specification

NO.	Items	Standard	Remarks
1.	Typical capacity	170mAh	Discharge Current:0,2C Cut-off voltage:3.0V/set @ 25°C
2.	Minimum capacity	153mAh	
3.	Charge voltage	4.2V/set	Max. @ 25°C
4.	Nominal voltage	3.7V/set	
5.	Discharge cut-off voltage	3.0V/set	
6	Charge current	Standard: 0.2C	
		Rapid: 1C	
7	Discharge current	Standard: 0.5C	Continue discharge
		Max: 1.5C	Continue discharge
		Peak: 3C	Less than 1second
8	Standard charge	0.2C CC(constant current) charge to 4.2V/set, then CV(constant voltage) 4.2V/set charge 3.5hours or 3.4mA(0.02C) cut off.	
9	Rapid charge	1C CC(constant current) charge to 4.2V/set, then CV(constant voltage) 4.2V/set charge 1.5hours or 3.4mA (0.02C) cut off.	
10	Max. charge current	170mA	1C
11	Internal Impedance	Typical value: 600mΩ	AC 1KHz after standard charge
12	Energy	0.629Wh	
13	Weight	5.5±0.5g	
14	Operating Temperature.	Charge: 0 ~ 45°C	
		Discharge: -10 ~ 45°C	
15	Storage Temperature Humidity	Short period less than 1 month 0°C~+45°C Long period less than 6 month 10°C~+35°C 60±15%RH	

During long storage, please refresh the battery every 3 months, which charging battery fully, discharging battery to empty and then charging battery with 50 ~ 70 % capacity.

PCM**1. Outline:**

This specification shall be applied to Lithium-ion polymer battery protection circuit module-model number PW-308B manufactured for AccuPower.

2. Application

- 2.1 Lithium-ion rechargeable battery packs
- 2.2 Lithium-ion polymer battery packs

3. Electrical CharacteristicsT_{opt}=25°C

Item	Symbol	Content	Criterion
Charging Voltage		Charging Input Voltage	4.2V
Current		Nominal Output Current (MAX)	2A
Over charge Protection	VDET1	Over charge detection voltage	4.28±0.025V
	tVDET1	Over charge detection delay time	1.0±0.5s
	VREL1	Over charge release voltage	4.05±0.06V
Over discharge protection	VDET2	Over discharge detection voltage	3.0V±0.075V
	tVDET2	Over discharge detection delay time	20±6mS
	VREL2	Over discharge release voltage	3.2±0.15V
Over current protection	VDET3	Over current detection voltage	0.2V±0.015V
	IDP	Over current detection current	2A-4A
	tVDET3	Detection delay time	12±4mS
		Release condition	Cut load
Short protection		Detection condition	Exterior short circuit
		Release condition	Cut short circuit
Interior resistance	RDS	Main loop electrify resistance	VGS=4.0V ; RSD≤60mΩ
Current consumption	IDD	Current consume in normal operation	4μA Type 8μA Max

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