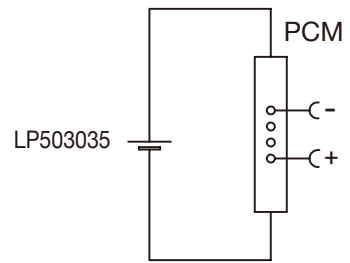


Circuit Diagram



# Specification

Lithium Polymer Battery Pack LP503035 3.7V 500mAh with Protection Circuit Module (PCM)  
 This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack manufactured by LiPol Battery Co., Ltd - China

## Mechanical Characteristics

- Cell ▶ LP503035
- PCM ▶ Yes
- NTC ▶ No
- Configuration ▶ 1S1P
- Weight ▶ appr. 10.0g

## Electrical Specification

- Rated Capacity ▶ 500mAh min, 520mAh typ.
- Nominal Voltage ▶ 3.7V
- Wat-Hour Rating ▶ 1.85Wh
- Max. Operating Voltage Range ▶ 2.75V to 4.20V
- Max. Charge Voltage ▶ 4.2V ±50mV
- Max. Charge Current ▶ 500mA
- Standard Charge Current ▶ 250mA
- Max. Continuous Discharge Current ▶ 500mA
- Standard Discharge Current ▶ 250mA
- Discharge Cut Off ▶ 2.75V
- Internal Impedance ▶ <50mΩ
- Expected Cycle Life @ (0.5C/0.5C) @ 23±5°C ▶ 500 cycles ≥ 80%

## Cell Protection

- Overcharge Detection ▶ 4.275 ±50mV (0.7 to 1.3sec. delay, release 4.275V ±50mV)
- Overdischarge Detection ▶ 2.75V ±50mV (14 to 26msec. delay, resume 2.50V ±50mV)
- Overcurrent Detection ▶ 2.0A to 2.5A (8 to 16msec. delay)

## Ambient Conditions

- Charge Temp. Range ▶ +10°C to +45°C
- Discharge Temp. Range ▶ -20°C to +60°C
- Storage Temp. Range ▶ 1 year at -20°C to +30°C >70%
- ▶ 3 months at -20°C to +45°C >70%
- ▶ 1 month at -20°C to +60°C >70%

## Environmental and Safety

Please follow LiPol Handling and Safety Precautions for Lithium Polymer Battery. This battery meets the requirements of Battery Directives, and the battery parts are IEC62133-2-2017 & RoHS-Compliant. For more safety precautions and performance standards, please go to [www.lipolbattery.com/support.html](http://www.lipolbattery.com/support.html)

Mae in mm All dimensions in mm	Freimatoleranzen Generaltolerances	Date	Name	<b>LiPol Battery</b>	Index
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten	up to 6 · 0,1 over 6 up to 30 · 0,2	Erst. / Orig 19.04.2023	Xie Qingfang		
Proprietary data, company confidential, all rights reserved.	over 30 up to 100 · 0,3 over 100 · 0,5	Gepr./check 19.04.2023	Guo Daxia	<b>3</b>	Zchnng. / Dwg. Nr. <b>FD_3203_10</b>
		Benennung/ Designation <b>LP503035</b>	Origin:		