

# Specification

Lithium Polymer Battery Pack LP450824 55mAh 3.7V 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 ▶ LP450824
- PCM ▶ Yes
- NTC ▶ No
- Configuration ▶ 1S1P
- Weight ▶ appr. 1.1g

## Electrical Specification

- Rated Capacity ▶ 55mAh min, 60mAh typ.
- Nominal Voltage ▶ 3.7V
- Wat-Hour Rating ▶ 0.2035Wh
- Max. Operating Voltage Range ▶ 2.75V to 4.20V
- Max. Charge Voltage ▶ 4.2V ±50mV
- Max. Charge Current ▶ 27.5mA
- Standard Charge Current ▶ 11mA
- Max. Continuous Discharge Current ▶ 55mA
- Standard Discharge Current ▶ 27.5mA
- Discharge Cut Off ▶ 2.75V
- Internal Impedance ▶ <200mΩ
- 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 ▶ 4A to 4.5A (8 to 16msec. delay)

## Ambient Conditions

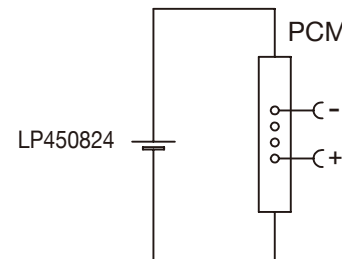
- Charge Temp. Range ▶ 0 to +45°C
- Discharge Temp. Range ▶ -20 to +60°C
- Storage Temp. Range ▶ 1 year at -20 to +30°C >70%
- ▶ 3 months at -20 to +45°C >70%
- ▶ 1 month at -20 to +60°C >70%
- ▶ 65 ±20%RH

Humidity

## 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 IEC 62133 & RoHS-Compliant. For more safety precautions and performance standards, please go to [www.lipolbattery.com/support.html](http://www.lipolbattery.com/support.html)

Circuit Diagram



Mae in mm All dimensions in mm	Freimatoleranzen Generaltolerances	Date 18.06.2020	Name Xie Qingfang	<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 18.06.2020	Gepr./check Guo Daxia		
Proprietary data, company confidential, all rights reserved.	over 30 up to 100 · 0,3 over 100 · 0,5	Benennung/ Designation LP450824		Zchnng. / Dwg. Nr. 3 FD_0824_70	
		Origin:		support@lipolbattery.com	www.LiPolBattery.com