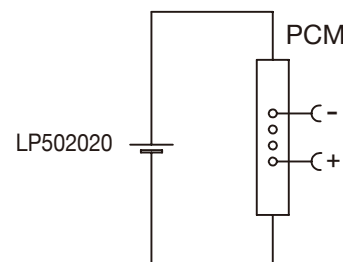


Circuit Diagram



Specification

Lithium Polymer Battery Pack LP502020 140mAh 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	▶ LP502020
PCM	▶ Yes
NTC	▶ No
Configuration	▶ 1S1P
Weight	▶ appr. 2.8g

Electrical Specification

Rated Capacity	▶ 140mAh min, 170mAh typ.
Nominal Voltage	▶ 3.7V
Wat-Hour Rating	▶ 0.518Wh
Max. Operating Voltage Range	▶ 2.75V to 4.20V
Max. Charge Voltage	▶ 4.2V ±50mV
Max. Charge Current	▶ 70mA
Standard Charge Current	▶ 28mA
Max. Continuous Discharge Current	▶ 140mA
Standard Discharge Current	▶ 70mA
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%
Humidity	▶ 65 ±20%RH

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

Mae in mm All dimensions in mm	Freimatoleranzen Generaltolerances	Date 04.12.2020	Name Xie Qingfang	LiPol Battery
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten	up to 6 · 0,1 over 6 up to 30 · 0,2	Erst. / Orig 04.12.2020	Gepr./check Guo Daxia	
Proprietary data, company confidential, all rights reserved.	over 30 up to 100 · 0,3 over 100 · 0,5	Benennung/ Designation LP502020		Zchnng. / Dwg. Nr. 3 FD_2020_70
		Origin:	support@lipolbattery.com	Index www.LiPolBattery.com