

30  
double-sided  
adhesive tape

60  
wires  
28AWG UL1571

50  
connector  
Molex 51021-0300

40  
adhesive tape kapton

20  
PCM

10  
LP852040

40  
adhesive tape  
kapton (2x)

8,5<sup>+0,3</sup>  
-0,3

40<sup>+1,0</sup>  
-1,0

10<sup>+3,0</sup>  
-3,0

20<sup>+0,5</sup>  
-0,5

LiPo Battery 3.7V  
LP852040 620mAh

## Specification

Lithium Polymer Battery Pack LP852040 620mAh 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	▶ LP852040
PCM	▶ Yes
NTC	▶ 10KΩ 1% +25C B3380
Configuration	▶ 1S1P
Weight	▶ appr. 12g

### Electrical Specification

Rated Capacity	▶ 620mAh min, 640mAh typ.
Nominal Voltage	▶ 3.7V
Wat-Hour Rating	▶ 2.29Wh
Max. Operating Voltage Range	▶ 2.75V to 4.20V
Max. Charge Voltage	▶ 4.2V ± 50mV
Max. Charge Current	▶ 310mA
Max. Continuous Discharge Current	▶ 620mA
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	▶ 2A to 4.5A (8 to 16msec. delay)

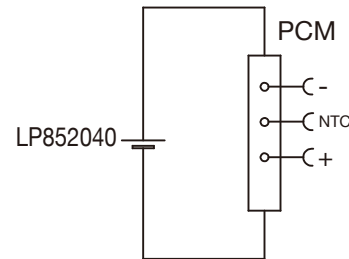
### Ambient Conditions

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%
Overcurrent Detection	▶ 3 moths 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](http://www.lipolbattery.com/support.html)

Circuit diagram



Mae in mm All dimensions in mm	Freimatoleranzen Generaltoleranzen	Date	Name	<b>+ LiPol Battery</b>
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten	up to 6 : 0,1 over 6 up to 30 : 0,2 over 30 up to 100 : 0,3 over 100 : 0,5	Erst. / Orig 23.05.2019	Xie Qingfang	
Proprietary data, company confidential, all rights reserved.		Gepr./Check 23.05.2019	Guo Daxia	
		Benennung/ Designation	LP852040	
		Origin:		Zchnng. / Dwg. Nr. 3 FD_1200_20
				Index support@lipolbattery.com www.LiPolBattery.com