

30
double-sided
adhesive tape

60
wires
28AWG UL1571

50
connector
JST SHR-03V-S-B

40
adhesive tape kapton

20
PCM

10
LP412550

40
adhesive tape
kapton (2x)

4,1 ^{+0,3}
-0,3



25 ^{+0,5}
-0,5

50 ^{+1,0}
-1,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
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50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

50 ^{+3,0}
-3,0

Specification

Lithium Polymer Battery Pack LP412550 500mAh 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 ▶ LP412550
- PCM ▶ Yes
- NTC ▶ 10KΩ 1% +25C B3380
- Configuration ▶ 1S1P
- Weight ▶ appr. 10g

Electrical Specification

- Rated Capacity ▶ 490mAh min, 500mAh 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 ▶ 250mA
- Max. Continuous Discharge Current ▶ 500mA
- 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)

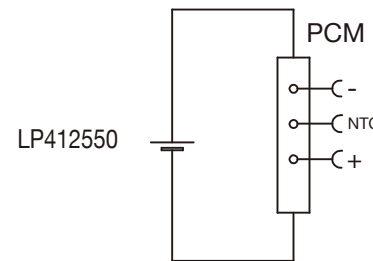
Ambient Conditions

- 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%
- Humidity ▶ 1 month at -20 to +60°C >70%
- ▶ 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

Circuit diagram



Mae in mm All dimensions in mm	Freimatoleranzen Generaltoleranzen	Date	Name	+ LiPol Battery	
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten	up to 6 : 0,1 over 6 up to 30 : 0,2	Erst./ Orig	02.01.2019		Xie Qingfang
Proprietary data, company confidential, all rights reserved.	over 30 up to 100 : 0,3 over 100 : 0,5	Gepr./Check	02.01.2019		Guo Daxia
		Benennung/ Designation	LP412550		
		Origin:	support@lipolbattery.com		
			Zchnng. / Dwg. Nr.	Index	
			1	FD_3245_70	
			www.LiPolBattery.com		