

# Specification

Lithium Polymer Battery Pack LP503040 560mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack manufactured by Akyga Battery

### Mechanical Characteristics

Type number: LP503040  
 Designation IEC system: Lithium polymer battery pack  
 Length:  $40 \pm 0.4$ mm  
 Width:  $30 \pm 0.4$ mm  
 Thickness:  $5.0 \pm 0.2$ mm  
 Cable:  $100.0 \pm 3$ mm (26AWG UL1571)  
 Weight approx: 12.0g

### Electrical Specification

Rated capacity: 560mAh min, 570mAh typ.  
 Nominal voltage: 3.7V  
 Max. operating voltage range: 3.0V to 4.2V  
 Charge voltage:  $4.2 \pm 50$ mV  
 Initial charge current: Standard charge: 112mA  
 Rapid charge: 280mA  
 Charging cut-off (A or B)  
 A) By time: Standard charge: 5 hours  
 Rapid charge: 2 hours  
 B) By min. current: 1.2mA  
 Max discharge current: 560mA  
 Internal impedance (1kHz): approx 82mOhm  
 Exp. cycle life: >500 cycles >80% of initial cap. (0.5C/0.5C)  
 Cell protection  
 Overcharge detection:  $4.325 \pm 25$ mV  
 (0.5 to 2.0 sec. delay, resume  $4.075 \pm 50$ mV)  
 Overdischarge detection:  $3.00V \pm 80$ mV  
 (6.25 to 250msec. delay, resume  $2.9V \pm 100$ mV)

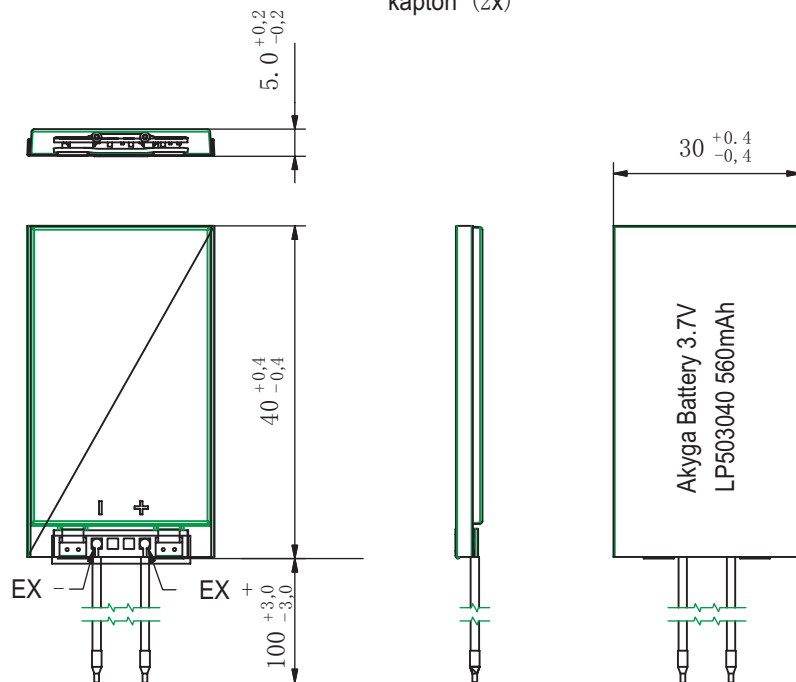
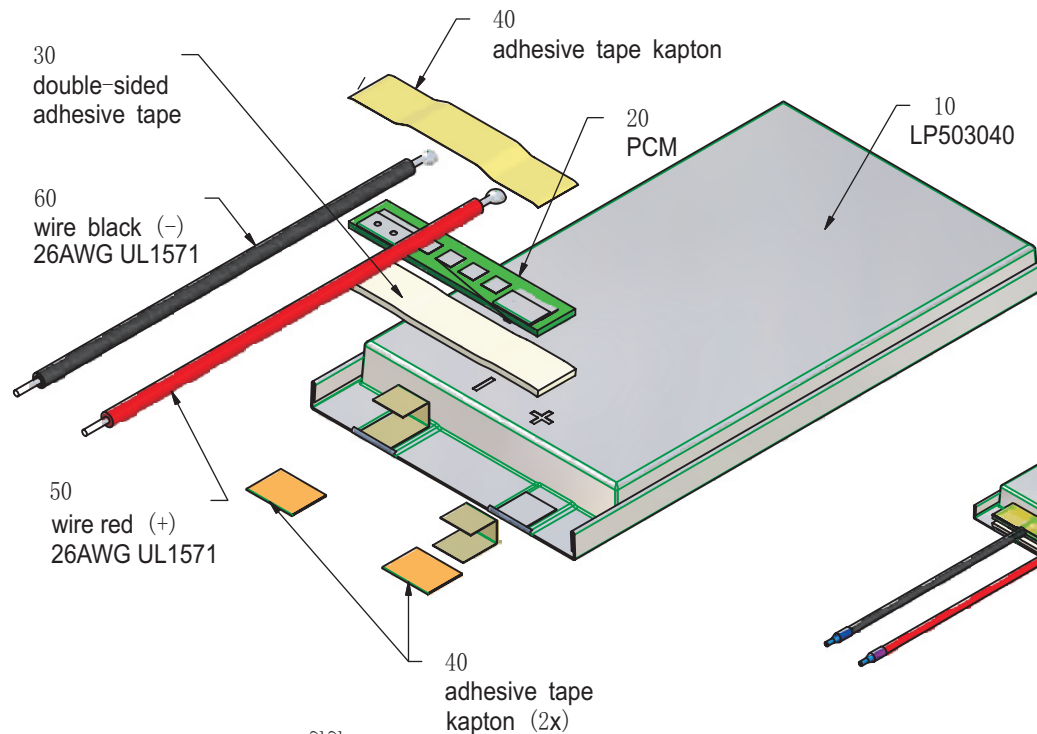
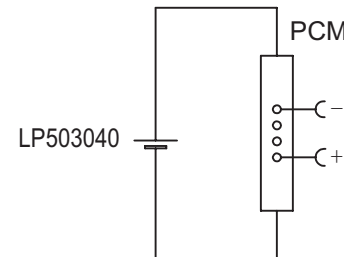
### Ambient conditions

Temperature range  
 Charge: 0 to +45°C  
 Discharge: -20 to +60°C  
 Charge retention/Storage: 1 year at -20 to 20°C >70%  
 3 month at -20 to 45°C >70%  
 1 month at -20 to 60°C >70%

### Safety

Please follow handling and Safety Precautions Poliflex.

### Circuit diagram



| Index  |   | Alteration   |            | Date                   | Name |              |
|--|---|--|------------|------------------------|------|--------------|
| Projection:  |   | Diese Mae werden besonders gepruft<br>This dimensions are considered inspectable |            | Material: 6645178 5192 |      |              |
| Mae in mm  | Freimatoleranzen                        | Date   | Name       |                        |      |              |
| All dimensions in mm   | Generaltoleranzen                       | Erst./Orig.  | 25.06.2015 |                        |      | Xie Qingfang |
| Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten.   | up to 6: 0,1<br>over 6 up to 30: 0,2    | Bearb./Desig.  |            |                        |      |              |
| Proprietary data, company confidential, all rights reserved. | over 30 up to 100: 0,3<br>over 100: 0,5 | Gepr./Check  | 25.06.2015 | Guo Daxia              |      |              |
|  |   | Benennung/Designation  |            | Zchnng. / Dwg.Nr.      |      |              |
|  |   | LP503040.3   |            | 3 FD_4344_56           |      |              |
|  |   | Origin:  |            | Index                  |      |              |