

# Specification

**Lithium Polymer Battery Pack (LP503040) 550mAh 3.7V with Protection Circuit Module (PCM)**  
 This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack manufactured by Cellevia

## 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:  $150 \pm 3.0$ mm (26AWG UL 1007)  
 Weight: appr. 11.0g  
 Connector: JST 2.54 male & female connectors

## Electrical Specification

Rated capacity: 550mAh min, 580mAh 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: 275mA  
 Rapid charge: 550mA  
 Charging cut-off (A or B)  
 A) By time: Standard charge: 7 hours  
 Rapid charge: 4 hours  
 B) By min. current: 11.0mA  
 Max continuous discharge current: 550mA  
 Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)  
 Internal impedance (1kHz): approx 67mOhm  
 Cell protection  
 Overcharge detection:  $4.325 \pm 25$ mV  
 (0.5 to 2.0 sec. delay, resume  $4.075 \pm 50$ mV)  
 Overdischarge detection:  $3.00V \pm 25$ mV  
 (6.25 to 250msec. delay, resume  $2.9V \pm 100$ mV)

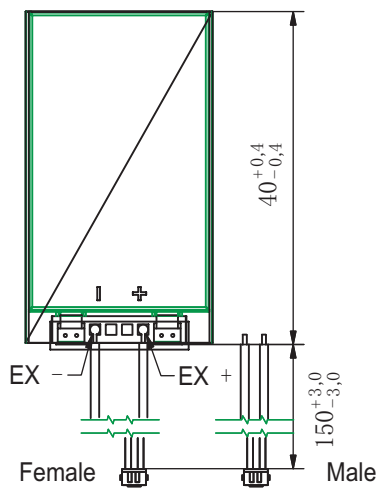
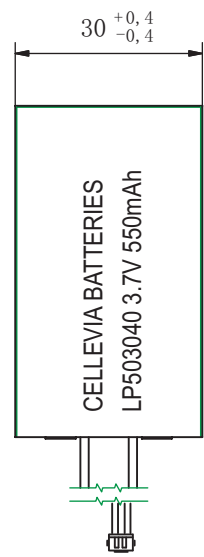
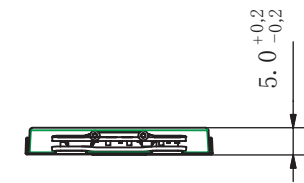
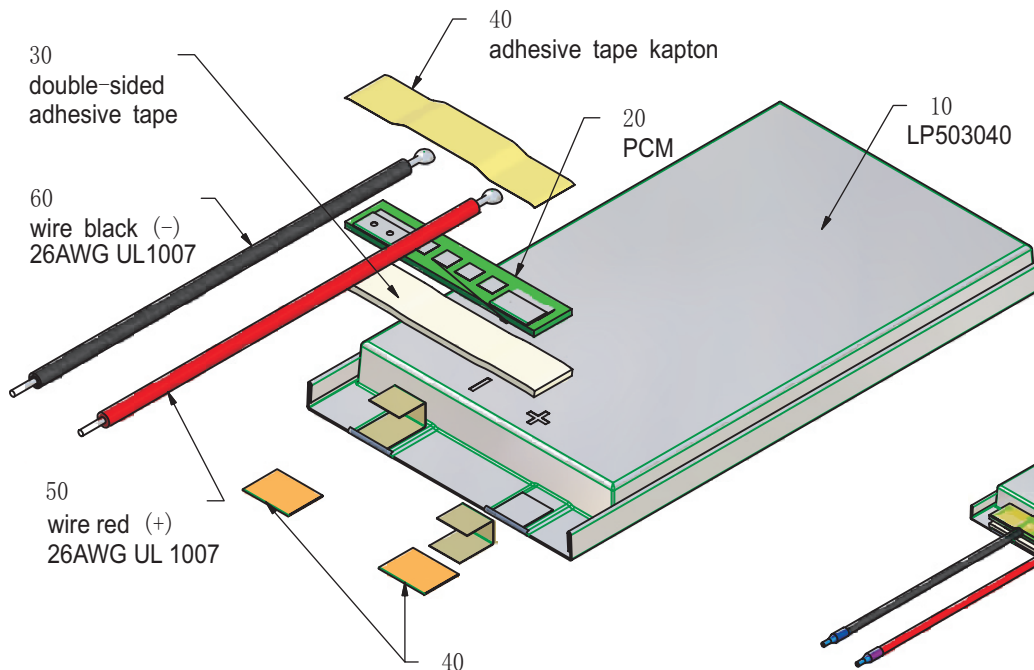
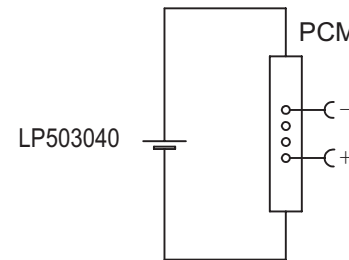
## Ambient conditions

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:                                                  |                   | <input type="checkbox"/> Diese Mae werden besonders gepruft<br><input type="checkbox"/> This dimensions are considered inspectable |            | Material: 6645175 6819 |            |              |
| Mae in mm                                                    | Freimatoleranzen  | Date                                                                                                                               | Name       |                        |            |              |
| All dimensions in mm                                         | Generaltoleranzen | Erst./Orig.                                                                                                                        | 12.08.2013 |                        |            | Xie Qingfang |
| Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten.   | up to 6           | Bearb./Desig.                                                                                                                      |            |                        |            |              |
|                                                              | up to 30          | Gepr./Check.                                                                                                                       | 12.08.2013 |                        |            | Guo Daxia    |
| Proprietary data, company confidential, all rights reserved. | over 6            | Benennung/Designation                                                                                                              |            | Zchng. / Dwg. Nr.      | Index      |              |
|                                                              | up to 30          | LP503040                                                                                                                           |            | 3                      | FD_2566_22 |              |
|                                                              | over 30           | Origin:                                                                                                                            |            |                        |            |              |
|                                                              | up to 100         |                                                                                                                                    |            |                        |            |              |
|                                                              | over 100          |                                                                                                                                    |            |                        |            |              |