

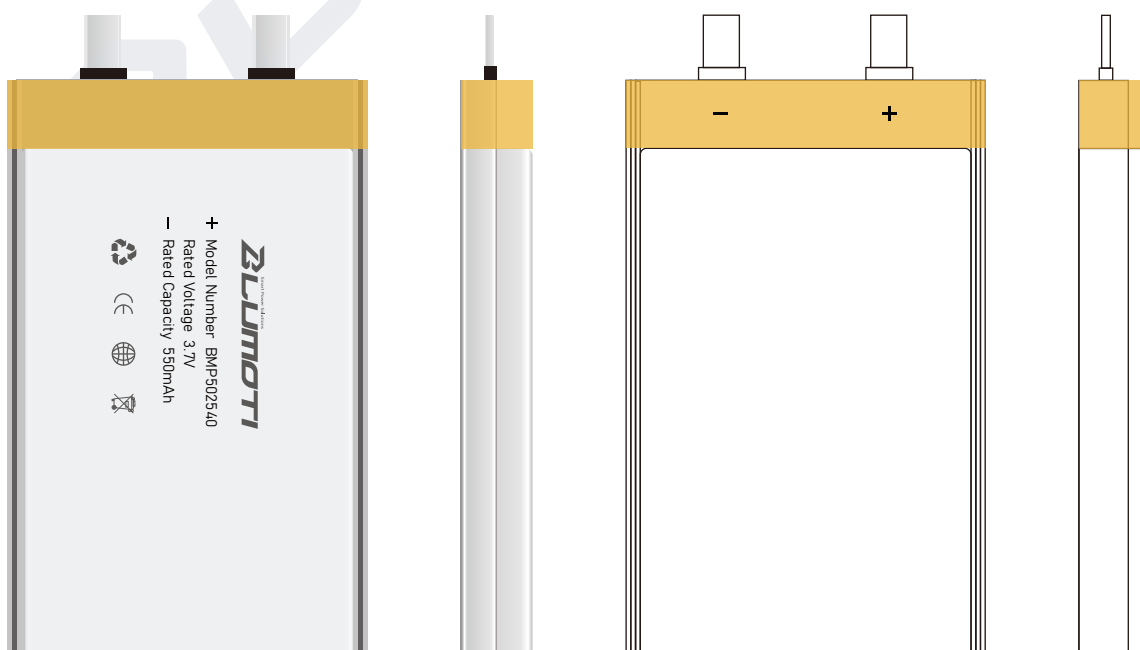
1.Scope of Application

This specification applies to Model BMP502540 lithium-ion polymer rechargeable cells, with a nominal voltage of 3.7 V and a nominal capacity of 550 mAh. This document is intended for product selection, sample confirmation, incoming inspection, and structural design reference.

Unless otherwise agreed, this document refers to bare cells only, excluding protection circuits, thermistors, connecting wires, connectors, adhesive tapes, brackets, or housings. The final finished battery pack must be equipped with protection circuits and structural protection that meet the application requirements.

2.Product Type and Product Model

Item	Specification
2.1 Type	Polymer Li-ion Rechargeable Battery Cell
2.2 Model	BMP502540

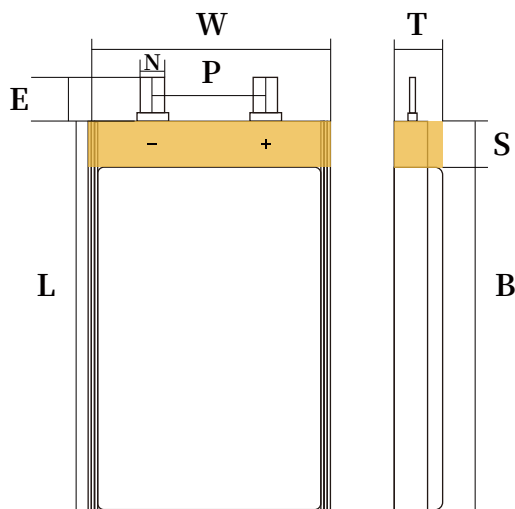


3. Basic Product Characteristics

NO.	Item		Characteristics
3.1	Rated Capacity		550mAh
3.2	Minimum Capacity		550 mAh
3.3	Nominal Voltage		3.7 V
3.4	Rated Energy		2.035Wh
3.5	Charge Limit Voltage		4.20V
3.6	Discharge Cut-off Voltage		3.0 V
3.7	End-of-charge Current		0.01 C = 5.5 mA
3.8	Standard Charge		Charge at 0.2C = 110 mA with constant current to the charge limit voltage, then charge at constant voltage until the end-of-charge current is reached.
3.9	Standard Discharge		Discharge at 0.2 C = 110 mA with constant current to the discharge cut-off voltage.
3.10	Maximum Continuous Charge Current		0.5 C, 275 mA
3.11	Maximum Continuous Discharge Current		1.0 C, 550 mA
3.12	3.12.1	Charge Temperature Range	0 °C–45 °C
	3.12.2	Discharge Temperature Range	-10 °C to 60 °C
	3.12.3	Storage Temperature Range	-20 °C to 60 °C
3.13	Operating and Storage Humidity Range		65±20% RH
3.14	Weight		Less than 8.0 g

*Note: C-rate is calculated based on the nominal capacity of 550 mAh.

4.Cell Dimensions



Item	Description	Dimension
W	Cell Width	Max 25.0 mm
T	Cell Thickness	Max 5.0 mm
L	Cell Length Excluding Tabs	Max 40.0 mm
B	Main Body Length	Max 36.5 mm
S	Top Seal Width	3.5 mm $\pm$ 1.0 mm
E	Tab Protrusion Length	8.0mm $\pm$ 1.0mm
P	Tab Center-to-Center Pitch	12.5 mm $\pm$ 1.0 mm
N	Tab Width	6.0 mm $\pm$ 1.0 mm

Unit: mm

Drawing not to scale. Dimensions shown shall prevail.

B and S are reference dimensions. Overall dimension L shall prevail.

5.Cell Appearance Drawing

