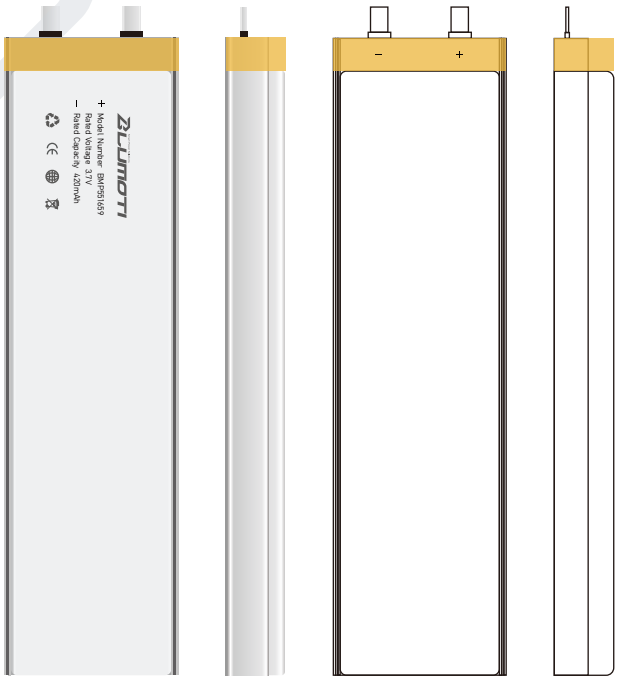
1.Scope of Application

This specification applies to Model BMP551659 lithium-ion polymer rechargeable cells, with a nominal voltage of 3.7 V and a nominal capacity of 420 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	BMP551659

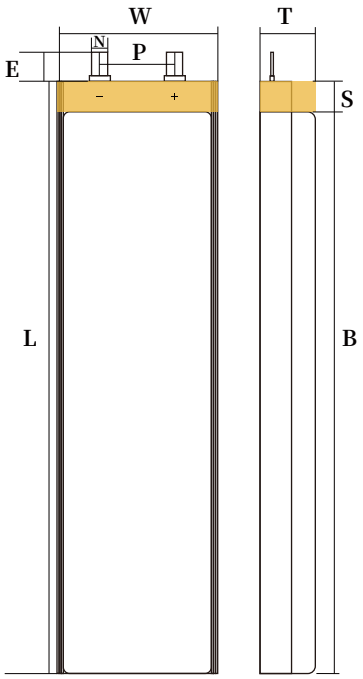


3.Basic Product Characteristics

NO.	Item	Characteristics
3.1	Rated Capacity	420mAh
3.2	Minimum Capacity	420 mAh
3.3	Nominal Voltage	3.7 V
3.4	Rated Energy	1.554 Wh
3.5	Charge Limit Voltage	4.20 V
3.6	Discharge Cut-off Voltage	3.0 V
3.7	End-of-charge Current	0.01 C = 4.2 mA
3.8	Standard Charge	Charge at 0.2C =84 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= 84 mA with constant current to the discharge cut-off voltage.
3.10	Maximum Continuous Charge Current	0.5 C, 210 mA
3.11	Maximum Continuous Discharge Current	1.0 C, 420 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 7.0 g

✳Note: C-rate is calculated based on the nominal capacity of 420 mAh.

4.Cell Dimensions



Item	Description	Dimension
W	Cell Width	Max 16.0 mm
T	Cell Thickness	Max 5.5 mm
L	Cell Length Excluding Tabs	Max 59.0 mm
B	Main Body Length	Max 55.5 mm
S	Top Seal Width	3.5 mm ± 0.5 mm
E	Tab Protrusion Length	8.0mm±1.0mm
P	Tab Center-to-Center Pitch	8.5 mm ± 1.0 mm
N	Tab Width	3.0 mm ± 0.1 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