

# 1.Scope of Application

This specification applies to Model BMP451230 lithium-ion polymer rechargeable cells, with a nominal voltage of 3.7 V and a nominal capacity of 140 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 | BMP451230                                |

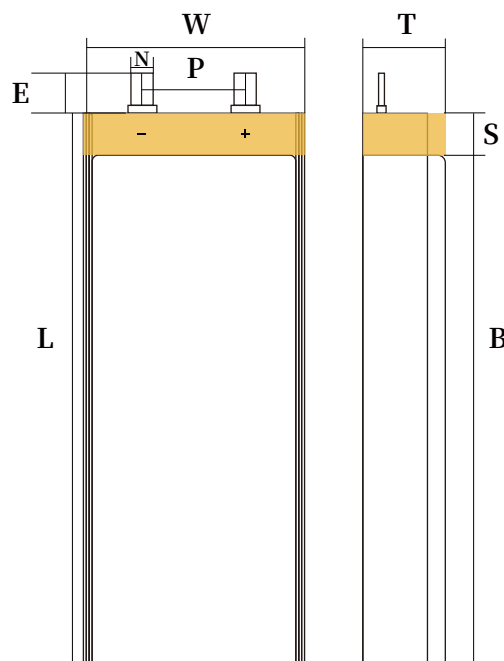


### 3. Basic Product Characteristics

| NO.  | Item                                 |                             | Characteristics                                                                                                                                       |
|------|--------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1  | Rated Capacity                       |                             | 140 mAh                                                                                                                                               |
| 3.2  | Minimum Capacity                     |                             | 140 mAh                                                                                                                                               |
| 3.3  | Nominal Voltage                      |                             | 3.7 V                                                                                                                                                 |
| 3.4  | Rated Energy                         |                             | 0.518 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 = 1.4 mA                                                                                                                                       |
| 3.8  | Standard Charge                      |                             | Charge at 0.2C = 28 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 = 28 mA with constant current to the discharge cut-off voltage.                                                                    |
| 3.10 | Maximum Continuous Charge Current    |                             | 0.5 C, 70 mA                                                                                                                                          |
| 3.11 | Maximum Continuous Discharge Current |                             | 1.0 C, 140 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 2.5 g                                                                                                                                       |

\*Note: C-rate is calculated based on the nominal capacity of 140 mAh.

## 4.Cell Dimensions



| Item | Description                | Dimension           |
|------|----------------------------|---------------------|
| W    | Cell Width                 | Max 12.0 mm         |
| T    | Cell Thickness             | Max 4.5 mm          |
| L    | Cell Length Excluding Tabs | Max 30.0 mm         |
| B    | Main Body Length           | Max 26.5 mm         |
| S    | Top Seal Width             | 3.5 mm $\pm$ 0.5 mm |
| E    | Tab Protrusion Length      | 8.0 mm $\pm$ 1.0 mm |
| P    | Tab Center-to-Center Pitch | 6.5 mm $\pm$ 1.0 mm |
| N    | Tab Width                  | 3.0mm $\pm$ 0.1mm   |

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

