01 / PRODUCT

Cell specification

BMP116077

Rechargeable lithium-ion polymer cell

5100 mAh	3.7 V	18.87 Wh
Rated capacity	Nominal voltage	Nominal energy



Appearance illustration

Scope of application

This specification describes model BMP116077, a 3.7 V, 5100 mAh lithium-ion polymer rechargeable cell. It provides product parameters and dimensional information for selection and sample evaluation.

The dimensions refer to the bare cell. Protection circuits, wires, connectors and housings are not included. A suitable protection circuit is required for the finished battery assembly.

Shenzhen Blumoti Energy Co., Ltd.

blumoti@blumoti.com +86 18676705240 / +86 13802921850

Room 612, Building A, Weidonglong Business Building, Longhua District, Shenzhen, China

02 / PERFORMANCE

Electrical characteristics

Parameter	Specification
Rated capacity	5100 mAh
Minimum capacity	5100 mAh
Nominal voltage	3.7 V
Nominal energy	18.87 Wh
Charge limit voltage	4.2 V
Discharge cut-off voltage	3 V
End-of-charge current	0.01 C / 51 mA
Standard charge (CC/CV)	0.2 C / 1020 mA
Standard discharge	0.2 C / 1020 mA
Max. continuous charge	0.5 C / 2550 mA
Max. continuous discharge	1 C / 5100 mA
Charge temperature	0 to 45 °C
Discharge temperature	-10 to 60 °C
Storage temperature	-20 to 60 °C
Operating / storage humidity	45–85% RH
Cell weight	< 105 g

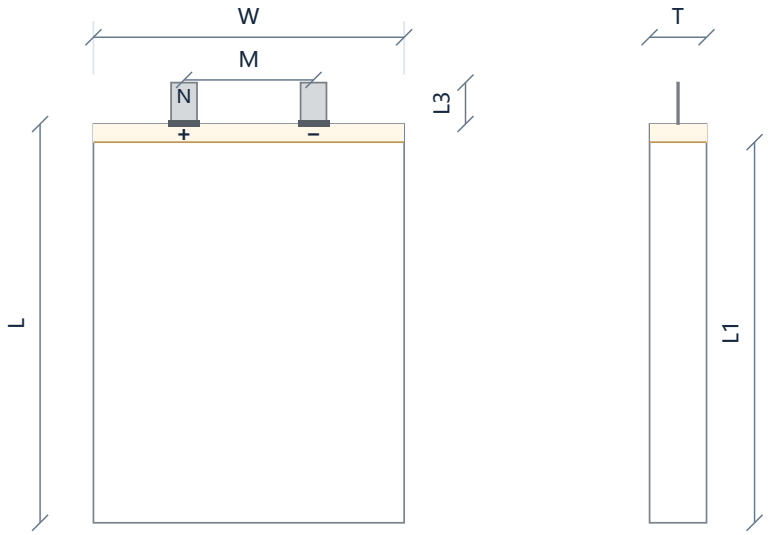
C-rate values are based on 5100 mAh. Standard charge: constant current to 4.2 V, followed by constant voltage until the end-of-charge current is reached.

blumoti@blumoti.com +86 18676705240 / +86 13802921850

Room 612, Building A, Weidonglong Business Building, Longhua District, Shenzhen, China

03 / DIMENSIONS

Dimensions & drawing



Schematic drawing. Not to scale.

Symbol	Description	Dimension / mm
T	Thickness	Max. 11
W	Width	Max. 60
L	Length	Max. 77
L1	Body dimension L1	Max. 73.5
L2	Dimension L2	Max. 77.3
L3	Tab protrusion	8 ± 1
M	Tab center spacing	25 ± 1
N	Tab width	5 ± 0.1

L2 is retained as a separate dimensional parameter. Refer to the approved mechanical drawing for assembly design.

blumoti@blumoti.com +86 18676705240 / +86 13802921850
Room 612, Building A, Weidonglong Business Building, Longhua District, Shenzhen, China