

Spec. No.	INR18650-29E	Version No.	1.0
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1. Scope

This product specification has been prepared to specify the rechargeable lithium-ion cell ('cell') to be supplied to the customer by Samsung SDI Co., Ltd.

2. Description and Model

2.1 Description	Cell (lithium-ion rechargeable cell)
2.2 Model	INR18650-29E
2.3 Site	Manufactured in China & Korea

3. Nominal Specifications

Item	Specification
3.1 Standard Discharge Capacity (Nameplate Capacity)	Min 2,500mAh - Charge : 0.33C(825mA), 4.125V, 0.025C(62.5mA) cutoff @RT - Discharge : 1C(2,500mA), 2.5V cutoff @ RT
3.2 Charging Method	CC-CV (constant voltage with limited current)
3.3 Max Charging Voltage	4.125V
	4.050V (for ESS, min 2200mAh @4.050V)
3.4 Charging Current rate	0.33C (825mA) * 1C = 2,500mA
	0.50C (1,100mA) (For ESS) * 1C = 2,200mA
3.5 Discharge Current rate	1C (2,500mA) * 1C = 2,500mA
	0.50C (1,100mA) (For ESS) * 1C = 2,200mA 1.0C (2,200mA) (Max current for ESS, not for cycle life) 3.0C (6,600mA), 10sec (Pulse current for ESS, not for cycle life)
3.6 Discharge Cut-off Voltage	2.5V
3.7 Operating Temperature (Cell Surface Temperature)	Charge : 0 to 45 (0 to 70 : for certification purpose only) Discharge:-20 to 60 (- 20 to 70 : for certification purpose only)
3.8 Cycle life 1	Capacity ≥ (80% of the Initial Capacity @RT) @after 1000cycles - Charge : 0.33C(825mA), 4.125V, CCCV 62.5mA cut-off @ RT - Discharge: 1.0C(2,500mA) , 2.5V cut-off @ RT
3.9 Cycle life 2 (ESS)	Capacity ≥ (70% of the Initial Capacity @RT) @after 3000cycles - Charge : 0.5C(1,100mA), 4.05V, CCCV 55mA cut-off @ RT - Discharge: 0.5C(1,100mA) , 2.5V cut-off @ RT

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Item	Specification
3.10 Storage Temperature	1 year : 0~25°C (1*) 3 months : 0~45°C (1*) 1 month : 0~55°C (1*)
3.11 Cell Weight	44.8±2g
3.12 Cell Dimension	Height: 64.87±0.13 mm Diameter: 18.33±0.07 mm
3.13 Nominal Voltage	3.7V

Note (1): If the cell is kept as ex-factory status, the capacity recovery rate is more than 80%.

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4. Outline Dimensions

See the Fig. 1

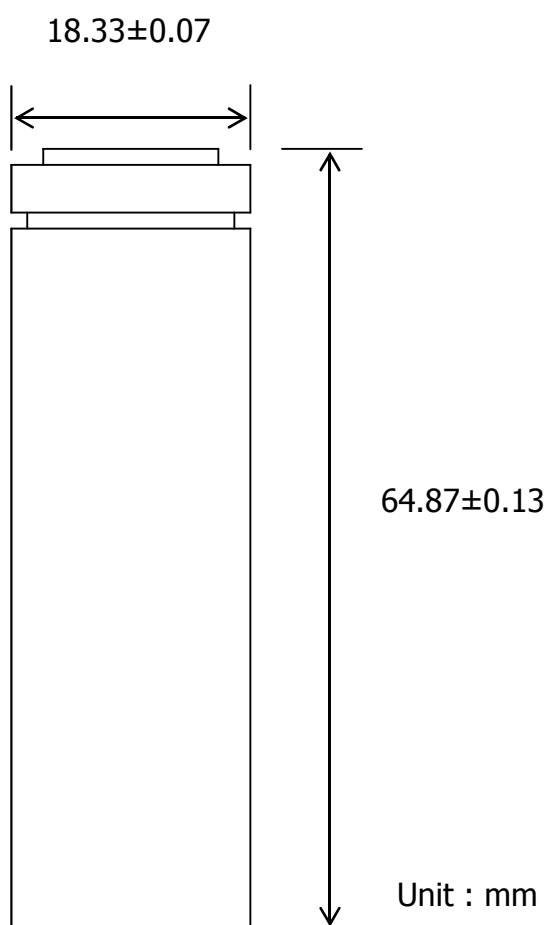


Fig. 1 Outline Dimensions of INR18650-29E