

Title

Lithium Ion Battery Specification (Cylindrical Type)

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3 Scope

This specification applies to the Lithium Ion Battery NCR18650B

This Specification shall not apply to special applications requiring a high degree of quality and reliability where the failure or malfunction of the products may directly jeopardize life or cause threat of personal injury. A non-exhaustive list of such applications includes: weapons, aircraft and aerospace equipment, aircraft electronics equipment, medical equipment (excluding Class 1 equipment), intrinsically safe equipment, electric vehicles, hybrid electric vehicles, and electric motorcycles (excluding electric bicycles).

4 Battery Classification and Product Code

4.1	Battery Classification	Lithium Ion Battery
4.2	Product Code	
4.3	Model Name	NCR18650B
4.4	Cell Type	NCR18650BF

*This model is not controlled under Wassenaar Arrangement because of the relaxation for criterion. However, some of the countries have not amended the laws and/or regulations. Please make sure to confirm with the governmental authorities of the relevant countries for further detail.

5 Nominal Specifications

Item	Specifications	Notes
5.1	Rated Capacity	3200mAh 0.64A discharge at 20°C
5.2	Capacity (Minimum)	3250mAh 0.65A discharge at 25°C
5.3	Capacity (Typical)	3350mAh Reference only
5.4	Nominal Voltage	3.6V 0.65A discharge
5.5	Discharging End Voltage	2.5V
5.6	Charging Current (Std.)	1.625A
5.7	Charging Voltage	4.20 ± 0.03V
5.8	Charging Time (Std.)	4.0 hours
5.9	Continuous Discharge Current (Max.) *1	4.875A 0 ~ +40°C
5.10	Internal Resistance	less than 100mΩ AC impedance 1 kHz
5.11	Weight	less than 48.0g
5.12	Operating Temperature	Charge 10 ~ +45°C
		Discharge -20 ~ +60°C
5.13	Storage Conditions	less than 1 month -20 ~ +50°C
		less than 3 months -20 ~ +40°C
		less than 1 year -20 ~ +20°C

Recoverable Capacity:
80% *2

*1 The maximum discharge current for a single cell use. However after the battery pack assembly, maximum discharge current will be limited by a protection circuit or device.

*2 Recoverable Capacity = $\frac{\text{Discharge Time after Storage}}{\text{Initial Discharge Time}} \times 100$

The discharge time is measured by fully charging the battery at 25°C and then discharging it at a current of 0.65A to 2.5V per cell in series.

File No

NCR18650

Portable Rechargeable Battery Business Division,
SANYO Electric Co., Ltd.