

Title	Lithium Ion Battery Specification (Cylindrical Type)	Page	6/13
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3 Scope

This specification applies to the Lithium Ion Battery

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	NCR20700B
4.4 Cell Type	NCR20700B

5 Nominal Specifications

Item	Specifications	Notes
5.1 Rated Capacity	4000 mAh	0.81A discharge at 20°C
5.2 Capacity (Minimum) *1	4050 mAh	0.81A discharge at 25°C
5.3 Capacity (Typical)	4250 mAh	Reference only
5.4 Nominal Voltage	3.6 V	0.81A discharge
5.5 Discharging End Voltage	2.5 V	
5.6 Charging Current (Std.)	2.025 A	
5.7 Charging Voltage	4.20 ± 0.03 V	
5.8 Charging Time (Std.)	4.0 hours	
5.9 Continuous Discharge Current (Max.) *2,3	12 A(TBD)	0 ~ +40°C
5.10 Internal Resistance	less than 20 mΩ(TBD)	AC Impedance 1 kHz
5.11 Weight	less than 63.0g(TBD)	
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% *4

*1 Capacity is measured by the discharge at 0.81A until end voltage of 2.5V after fully charged at 25°C as described in the specification.

*2 Discharge at high rate or high temperature environment will accelerate the degradation of the battery capacity. As a result, battery life will be shorten.

*3 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.

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

The discharge time is measured by fully charging the battery at 25°C and then discharging it at a current of 0.81A to 2.5V per cell in series.

*5 Maximum cell surface temperature :The cell temperature must not exceed 70°C.

File No	NCR20700B	Rechargeable Battery Business Division, SANYO Electric Co., Ltd.
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