## 3 Scope

This specification applies to the Lithium Ion Battery NCR18650G

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 | NCR18650G |
| 4.4 | Cell Type | NCR18650GA |

## 5 Nominal Specifications

| Item | | | Specifications | Notes |
|---|---|---|---|---|
| 5.1 | Rated Capacity | | 3300mAh | 0.67A discharge at 20°C |
| 5.2 | Capacity (Minimum) *1 | | 3350mAh | 0.67A discharge at 25°C |
| 5.3 | Capacity (Typical) | | 3450mAh | Reference only |
| 5.4 | Nominal Voltage | | 3.6V | 0.67A discharge |
| 5.5 | Discharging End Voltage | | 2.5V | |
| 5.6 | Charging Current (Std.) | | 1.675A | |
| 5.7 | Charging Voltage | | 4.20 ± 0.03V | |
| 5.8 | Charging Time (Std.) | | 4.0hours | |
| 5.9 | Continuous Discharge Current (Max.) *2,3 | | 10A | 0 ~ +40°C |
| 5.10 | Internal Resistance | | less than 38mΩ | AC impedance 1 kHz |
| 5.11 | Weight | | less than 49.5g | |
| 5.12 | Operating Temperature | Charge | 10 ~ +45°C | |
| | | Discharge | -20 ~ +60°C | |
| 5.13 | Storage Conditions | less than 1 month | -20 ~ +50°C | Recoverable Capacity: 80%*4 |
| | | less than 3 months | -20 ~ + 40°C | |
| | | less than 1 year | -20 ~ + 20°C | |

*1 Capacity is measured by the discharge at 0.67A 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.

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

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

The discharge time is measured by fully charging the battery at 25°C and then discharging it at a current of 0.67A to 2.5V per cell in series.

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