

Lithium Ion Cell  
NCR-B/T06SEA  
Specification

### 1. Application Range

This specification is applied to Lithium ion cell NCR-B/T06SEA which will be used for lithium ion battery packs to be manufactured by

Applied standard(regulation): UL1642, Electrical Appliance and Material Safety Law(Japan), UN38.3

Confirmation should be done ,except for mentioned above standard(regulation).

### 2. Rated specification

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|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.1. Rated voltage:                            | 3.6 V                                                                                                                                                                           |
| 2.2. Capacity:                                 |                                                                                                                                                                                 |
| 2.2.1. Rated capacity:                         | 2900mAh (Min.cap. in quick charging, standard discharging(1) at 20°C)                                                                                                           |
| 2.2.2. Nominal capacity:                       | Min.2950mAh Typ.3070mAh(in quick charging, standard discharging(2) at 25°C)                                                                                                     |
| 2.3. Standard charging:                        | 4.2V, 443mA,60mA end (Constant voltage, constant current)<br>(Approval maximum charging voltage by tolerance : 4.25V)                                                           |
| 2.4. Quick charging:                           | 4.2V, 885mA, 60mA end (Constant voltage, constant current)<br>(Maximum charging voltage : 4.25V)<br>Charging method and charger are only those designated.                      |
| 2.5. Standard discharging:                     |                                                                                                                                                                                 |
| 2.5.1. Standard discharging (1):               | 580mA (Constant current, 2.5V end )                                                                                                                                             |
| 2.5.2. Standard discharging (2):               | 590mA (Constant current, 2.5V end )                                                                                                                                             |
| 2.6. Continuous allowable discharging current: | 3540mA (45°C or under)                                                                                                                                                          |
| 2.7. Temperature and humidity range:           | 0 to 45°C, 45 to 85%RH (in standard charging)<br>10 to 45°C, 45 to 85%RH (in quick charging)<br>-20 to 60°C, 45 to 85%RH (in standard discharging)                              |
| 2.8. Storage Temperature and humidity range:   | -20 to 35°C, 45 to 85%RH (within 1 year)<br>-20 to 40°C, 45 to 85%RH (within 6 months)<br>-20 to 45°C, 45 to 85%RH (within 1 month)<br>-20 to 50°C, 45 to 85%RH (within 1 week) |
- (Notes) The capacity recovery rate in the delivery state (30-35% capacity of fully charged) after storage is assumed to be 80% or more.

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| 2.9. Volume Energy density: | 620.2 Wh/l |
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- (Notes) This value is calculated by rated capacity, rated voltage and cell volume without shrink tube.

### 3. Remarks

- 3.1. Maximum voltage at standard and quick charging: The cell voltage must not exceed 4.25V.  
Even if factoring charge voltage control accuracy, the maximum voltage must never exceed 4.25V with any charge method(including pulse charge).
- 3.2. Protection circuit overdischarge prohibition voltage: The cell voltage must not be below 2.0V.
- 3.3. Pack construction(restriction of cell quantity for the battery pack)  
Maximum quantity number: in series = 4 cells, in parallel = 3 cells  
Maximum total quantity : 8 cells / one battery pack

### 4. Structure

The cell consists of the positive electrode plate, negative electrode plate, separator, electrolyte, case and assembled sealing cap. The positive and negative electrode plates are housed in the case in the state being separated by the separator, and the assembled sealing cap is fit to the case. The assembled sealing cap houses the positive electrode terminal, current shut off mechanism and explosion-proof safety valve element, making the case the negative electrode terminal.