SPEC. NO.	DM383B.804	ISSUE DATE		2016-3-15	
DESCRIPTION	Lithium-Ion Battery (model No. DM383B.804)	EDITION	0	PAGE	1/5

1. Applicability

The specification is applicable to Lithium-Ion Rechargeable battery model no.: DM383B.804

2. Ratings

2.1 Cell

2.1.1 Type of Cell : Sealed Lithium-ion cylindrical Rechargeable battery
2.1.2 Cell Model : PSI NCR18650B1S
2.1.3 Cell Size : 18650
2.1.4 Cell Typical capacity : 3350mAh
2.1.5 Cell Minimum capacity : 3250mAh
2.1.6 Number of cell used : 1PCS
2.1.7 Cell UL Number : MH12210

2.2 Pack

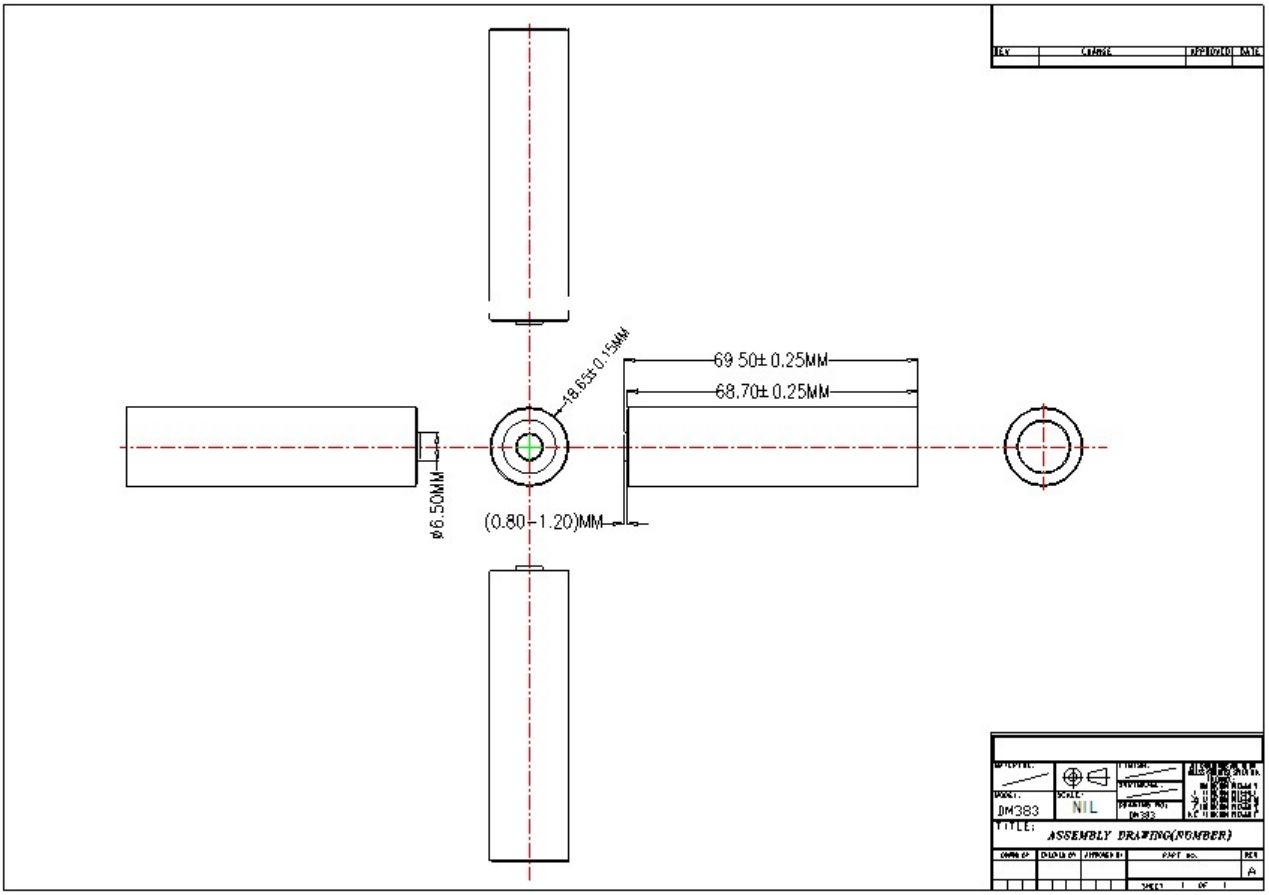
2.2.1 Rated voltage : 3.6V
2.2.2 Typical capacity : 3350mAh
2.2.3 Minimum capacity : 3250mAh
2.2.4 Standard charge : 670mA
2.2.5 Rapid charge : 1675mA
2.2.6 Standard discharge : 670mA
2.2.7 Maximum charging voltage: 4.2V
2.2.8 Maximum continuous discharge current : 3500mA
2.2.9 Battery Pack Color : Dark Blue
2.2.10 Operating temperature :

- 0 – 45℃ (charge)
- -20 - 60℃ (discharge)

2.2.11 Storage temperature :

- -20 - 50℃ (1 week)
- -20 - 35℃ (6 months)

3. Configuration and dimensions



4. Test conditions

Unless otherwise specified, all tests should be conducted within one month of delivery under the following conditions :

- Ambient temperature : 20 +/- 5℃.
- Relative humidity : 65 +/- 20%.

5. Performance

Item	Criteria	Test conditions
Capacity	Above 3250mAh	Standard charge and standard discharge
Internal impedance	Less than 150mohm	Measure AC impedance at 1kHz
Cycle life **	Above 2275mAh	300 cycles charging/discharging is repeated in the below condition. ● Charging: 670mA to 4.2V ● Rest time: 20min ● Discharging: 670mA up to 2.75V ● Temperature: 20±2℃
Leakage resistance	No leakage	Visually inspect battery pack after standard charge and storage at 25℃ for 14 days.
Drop test	No fire, no explosion, no leakage (max. weight loss 0.1%)	Drop battery pack after standard charged onto a bakelife floor from a height of 1 m for 6 times.
Vibration test	No fire, no explosion, no leakage (max. weight loss 0.1%)	The battery pack is vibrated in triaxial direction with 4 mm amplitude of frequency 30 Hz for 1 minute in each direction.
Short circuit test	No fire, no explosion, cell temperature shall not exceed 150 ℃	External short circuit
Dimensions	Refer to drawing of DM383	Measured by calipers
Battery weight	Approx. 49g	Measured by balance
Appearance	No crack, no leakage, no deformation	Visual inspection

Note: ** Data provided under "Cycle Life" in this document is our best estimate based on the technical data supplied by battery cell manufacturer in the Product Specification Form.

6. Warranty

One year limited warranty against workmanship and material defects. Manufacturer reserves the right to alter, amend the design, model and specification without prior notice.

7. Charge state of cell before shipment

Less than 30% state of charge for air shipments.

8. Safety precaution

Please follow the safety precaution carefully as improper handling of lithium-ion batteries may result in injury or damage from electrolyte leakage, heating ignition or explosion. To ensure safety, consult with manufacturer regarding the charge and discharge specifications, equipment structure, warning labels and other important details when designing equipment to use rechargeable Lithium-ion batteries.

Never charge the battery above 4.25V.
Never reverse charge the battery.
Never heat or incinerate the battery.
Never pierce, crush or cause mechanical damage to the battery.
Never charge a battery at high temperature condition, such as at or near a fire.
Never short circuit the battery.
Never discharge a battery to below 2.75V.
Never allow the battery to get wet or be immersed in water.
For long period of storage, temperature should be below 45℃.
After long period of storage, battery may required some cycling to recover capacity.
When disposing of secondary cells or batteries, keep cells or batteries of different electrochemical systems separate from each other.
Fully discharge each battery and collect each battery according to local regulations.

9. Safety Device and Abuse Requirement

Circuitry protection as described below has been presented inside the battery pack, to insure safety in case of misuse.

Overcharge Voltage Protection

At a charge voltage greater than 4.275±0.025V, the overcharge protection should engage interrupting the charge current.

Over Discharge Protection

When a voltage less than 2.5V±0.05V is reached upon discharging, the over discharge protection device should engage. The resulting discharge current should be below 1μA.

Over Discharge/Short Circuit Protection

When discharge current exceeds 3,0±0,9A, the over discharge current protection should engage interrupting the discharge current.