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DESCRIPTION	Lithium Ion Battery FML9063	EDITION	0	PAGE	1/5

## 1. Applicability

The specification is applicable to Ion Rechargeable batteries FML9063.

## 2. Ratings

### 2.1 Cell

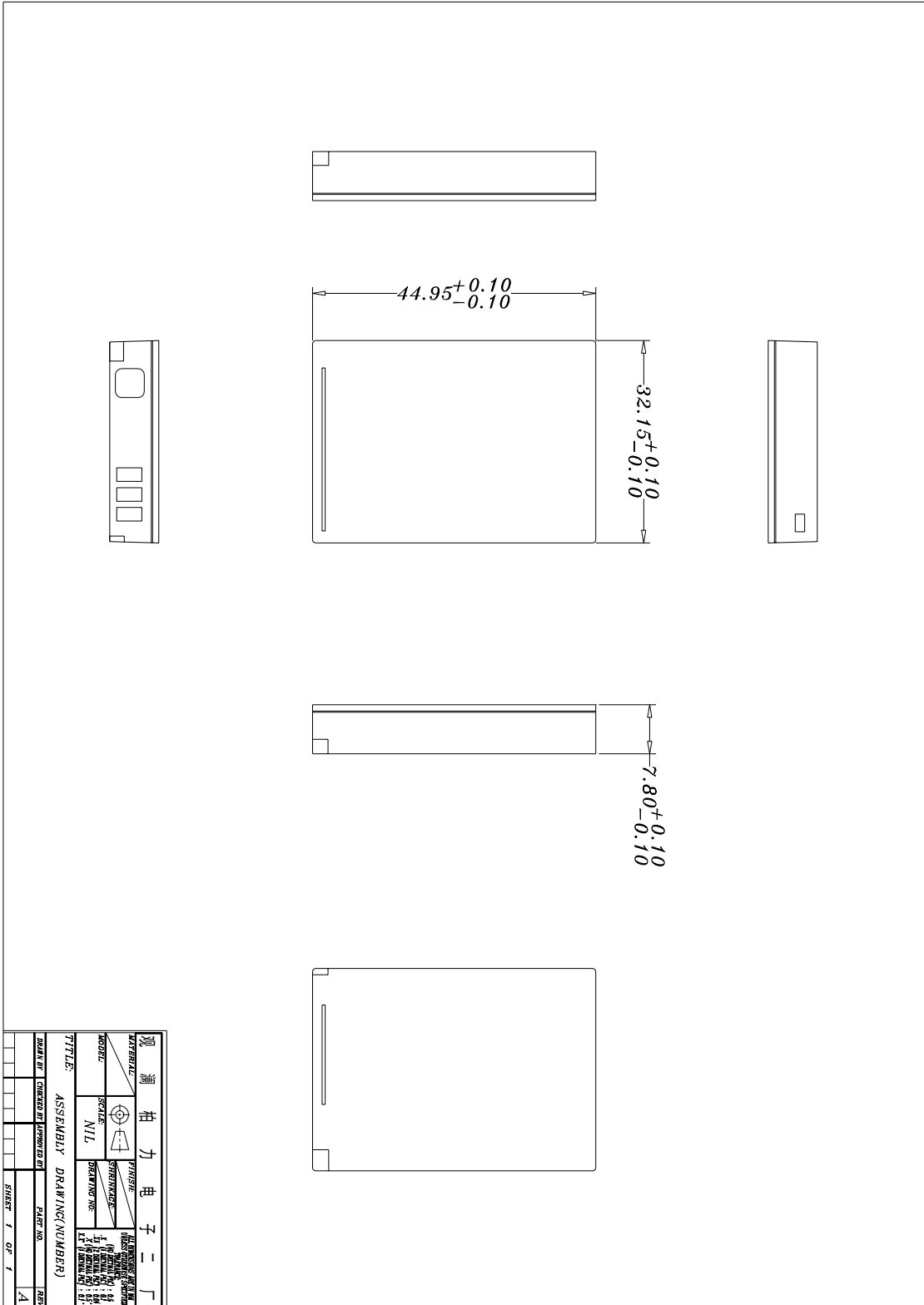
- 2.1.1 Type of Cell : Sealed Lithium-ion Prismatic Recharge battery
- 2.1.2 Cell Model : ICP073041A105
- 2.1.3 Cell Size : 073041
- 2.1.4 Cell Typical capacity : 1050 mAh
- 2.1.5 Cell Minimum capacity : 1000 mAh
- 2.1.6 Number of cell used : 1PC
- 2.1.7 Cell UL Number : MH45794

### 2.2 Pack

- 2.2.1 Rated voltage : 3.7V
- 2.2.2 Typical capacity : 1050 mAh
- 2.2.3 Minimum capacity : 1000 mAh
- 2.2.4 Standard charge : 210mA x 5.5hrs to 4.2V
- 2.2.5 Rapid charge : 525mA x 3hrs to 4.2V
- 2.2.6 Standard discharge current : 210mA
- 2.2.7 Maximum continuous discharge current: 1050mA
- 2.2.8 Discharge end voltage : 3.0V
- 2.2.9 Replace No. : Canon NB-5L
- 2.2.10 Battery Pack Color : Grey
- 2.2.11 Operating temperature : 0 - 45°C (charge)  
-20 - 60°C (discharge)
- 2.2.12 Storage temperature : -20 - 45°C (1 month)  
-20 - 45°C (3 months)  
-20 - 20°C (1 year)

3. Configuration and dimensions

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4. Test conditions

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

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

5. Performance

Item	Criteria	Test conditions
Capacity	Above 1000mAh	Standard charge and standard discharge
Internal impedance	Less than 220mohm	Measure AC impedance at 1kHz
Cycle life **	Above 740mAh	300 cycles charging/discharging is repeated in the below condition. <ul style="list-style-type: none"> <li>● Charging: 525mA to 4.2V</li> <li>● Rest time: 30min</li> <li>● Discharging: 525mA to 3V</li> <li>● Temperature: 25±2°C</li> </ul>
Leakage resistance	No leakage	Visually inspect battery pack after standard charge and storage at 25°C for 14 days.
Drop test	No fire, no explosion, no leakage (max. weight loss 0.1%)	Drop battery pack after standard charged onto a bakelite 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 (1 Hz per minute) for 1 minute in triaxial direction.
Short circuit test	No fire, no explosion, cell temperature shall not exceed 150°C	External short circuit
Dimensions	Refer to drawing of PL56	Measured by calipers
Battery weight	Approx. 20g	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.

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6. Material of Case

A non-inflammable material from GE injects the plastic casing, model CYCOLOY C2950-111. It is listed UL94 V-0VA.

7. 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.

8. Charge state of cell before shipment

Charge from 10% to 50% according to delivery condition.

9. 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.

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 3.0V per cell.

Never allow the battery to get wet or be immersed in water.

For long period of storage, temperature should be below 45°C.

After long period of storage, battery may required some cycling to recover capacity.

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## 10. 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  $4.3V \pm 0.1V$ , the overcharge protection should engage interrupting the charge current.

### Over Discharge Protection

When a voltage less than  $2.25V \pm 0.25V$  is reached upon discharging, the over discharge protection device should engage. The resulting discharge current should be below  $1\mu A$ .

### Over Discharge/Short Circuit Protection

When discharge current exceeds 2.47A the over discharge current protection should engage interrupting the discharge current.

### Over Current Protection

When battery load current exceeds 3.5A at  $20^{\circ}C$ , the Polyswitch (PTC) shall trip abruptly to a highly resistive state limiting current to milliamps. The device shall remain in the tripped state until the fault is corrected or removed.