

# Lithium Battery

## Rechargeable

**multicomp** PRO

**RoHS  
Compliant**



### Specification

No.	Item	Specification		Remark
1	Capacity	Nominal	6000mAh	1C discharge
		Minimum	5500mAh	
2	AC-IR "AC Impedance"	max	10Ω	AC 1HZ
3	Nominal Voltage		3.2V	
4	Cell Weight	Max.	140g	
5	End-of -charge Voltage		3.65V	
6	End of charge Current		300mA	
7	End of discharge Voltage		2V	
8	Charging Time		0.5h	1C
			0.16h	6C
9	Charge Method	Standard	6000mA	1C
		Maximum Charge Current	36000mA	6C
10	Standard Discharge Method		6000mA	1C
11	Max Continuous Discharge Current		36000mA	6C
12	Shelf Life		1 Year	
10	Appearance	Diameter	32.5mm	
13	Cell Dimension	Height	70.8mm	

# Lithium Battery

## Rechargeable



### Electrical Characteristics

	Test Item	Test Method	Criteria	
			Retention	Regain
1	High Temperature Charge Retention and Regain	Capacity after storage for 7d at 60±2°C after the standard charged measured with discharge current 0.5C to cut-off voltage	Relative Capacity	≥90% ≥95%
2	Storage	Cell shall be charged per 3.2, then stored at 25°C ± °C for 28 days. Finally discharged cell at 1 C to ending voltage.	Capacity recovery ≥90% nominal capacity	
3	Cycle Life	Cell shall be charged at CC/CV mode (CC: 1C, CV: 3.65 V, End-of-charge current: 0.05 C); After stored for 30 min, cell shall be discharged at CC mode (1 C, End-of-charge voltage: 2V); After stored for 30 min, tests shall be continued for 2000 times.	Capacity retention ≥80% nominal capacity	

### Mechanical Characteristic

	Test Item	Test Method	Criteria
1	Drop Test	The cell drops onto the cement court from 1.5 m height at positive and negative directions, respectively 1 time. And drop 2 times at a random direction of the cylindrical surface.	No leakage, no fire, no explosion
2	Vibration Test	The cell tested at 1.6mm max. excursion/1hertz/minute between 10hertz to 55hertz to 10hertz/90 to 100min or mutually perpendicular directions.	

### Safety Test

All below tests are carried out on the equipment's with forced ventilation and explosion-proof device. Before test, all cells should be charged in accordance with 6.2, and stored 24h prior for testing.

	Test Item	Test Method	Criteria
1	Impact Test	A Φ15.8 mm bar is to be placed on the center the cell and a 9.1kg weight is to be dropped from a height of 610 mm onto the cell, the distortion is allowed.	No fire, no explosion
2	Crush Test	The cell is to be crushed between two flat surfaces with 13 ±0.78kN pressure, and hold for 1min.	
3	Heating Test	Cell shall be charged per 6.2, then heated in an oven. Temperature will rise to 130 °C±2 °C at a rate of 5 °C/min and remain for 30 min. Check it for 1h.	
4	Overcharge Test	Cell shall be charged per 6.2, charged at 1C to ending voltage of 5.5 V or charged at 1C for 1h. Check it for 1h.	
5	Short-circuit Test	Cell shall be charged per 6.2, then short-circuited by connecting the positive and negative terminals with a resistance of <5 mΩ for 10 min.	



# Lithium Battery

## Rechargeable

**multicomp** PRO

### Standard cell Precaution

- a. Do not expose the cell to extreme heat or flame.
- b. Do not short circuit, over-charge or over-discharge the cell.
- c. Do not subject the cell to strong mechanical shocks.
- d. Do not immerse the cell in water or sea water, or get it wet.
- e. Do not reverse the polarity of the cell for any reason.
- f. Do not disassemble or modify the cell.
- g. Do not handle or store with metallic like necklaces, coins or hairpins, etc.
- h. Do not use the cell with conspicuous damage or deformation.
- l. Do not connect cell to the plug socket or car-cigarette-plug.
- j. Do not make the direct soldering onto a cell.
- k. Do not touch a leaked cell directly.
- l. Do not use for other equipment.
- m. Do not use Lithium-ion cell in mixture.
- n. Do not use or leave the cell under the blazing sun (or in heated car by sunshine).
- o. Keep cell away from children.
- p. Do not drive a nail into the cell, strike it by hammer or tread it.
- q. Do not give cell impact or fling it.

### Cell Operation Instruction

#### Charging

- a. Charge the cell in a temperature range of 0°C to 45°C.
  - b. Cell must be charged with constant current-constant voltage method.
- \* Do not continue to charge cell over specified time.

#### Discharging

#### Storage Recommendations

##### I Period Storage

- Storage the cell at temperature of -20°C to 45°C (less than 3 months), low humidity and no corrosive gas atmosphere.
- No press on the cell

##### b. Long Period Storage

- In case of long period storage (more than 3 months), storage the cell at temperature range of 0°C to 25°C, low humidity, no corrosive gas atmosphere.
- No press on the cell

### Part Number Table

Description	Part Number
Lithium Battery, 3.2V, 6.0Ah	MP013876

Dimensions : Millimetres

**Important Notice** : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
sg.element14.com/b/multicomp-pro

**multicomp** PRO