

Lionik Specifications

Lithium Polymer 041939

1. Scope Lionik 041939 cell have a combination of high energy density, super light and ultra thin. It's a perfect power source solution for DVD Player,Blue Tooth, Web pad and other handheld device.

2. Specifications

Specification Table of LionikBattery

Nominal voltage	3.7V	Cut-off voltage	3.0V
Nominal Capacity (mAh) ^{*1}	300mAh	Impedance ^{*2} Max (mohm)	135 (mΩ)
Cell Weight ^{*3}	5.8 (±0.2g)	Cycle Life	>= 500 Cycles
Standard charge method	Charging the cell initially with constant current at 0.5C and then with constant voltage at 4.2V till charge current < 0.05C		
Max. charge current	1C	Max. discharge current	2C
Standard charge	0.5C × 5hrs	Rapid charge	1C × 2.5hrs
Operating temperature		°C	°F
	Charging	0°C ~ 45°C	32°F ~ 113°F
	Discharging	-20°C ~ 60°C	-4°F ~ 140°F
	Storage	-20°C ~ 45°C	-4°F ~ 113°F
Cell dimension	size	mm	inch
	Length	39.0 ± 0.5	1.54 ± 0.02
	Width	19.0 ± 0.5	0.75 ± 0.02
	Thickness	4.00 ± 0.2	0.16 ± 0.01
Self-discharge	Residual capacity > 90% (@25°C±2°C, 180 days)		

*Remark:

^{*1} @ 0.2C discharge, 25°C

^{*2} Impedance is measured at AC 1KHz after Standard Charge.

^{*3} Cell weight is the approximate value for reference.

3. Performance

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:

Shenzhen Lionik Battery Co.,Ltd

Relative humidity : $65 \pm 20\%$ RH Ambient Temperature (Ta) : $20 \pm 5^\circ\text{C}$

Notes: Standard charge / discharge condition

Charge: 120mA (0.4C) \times 2.5 hrs Discharge: 30 mA (0.1C) to 3.0V

The batteries must be standard discharged before charging Battery test vide infra:

Test	Unit	Specification	Conditions	Remarks
Capacity	mAh	≥ 300	Standard Charge / Discharge	
Open Circuit Voltage (OCV)	V	4.2	Within 1 hr after standard charge	
Internal Impedance (Ri)	m Ω	≤ 120	Upon fully charge	
High Rate(1.0C) Discharge	min	≥ 54	Standard charge, 1 hr rest before discharge	Discharge cut-off voltage 3.0V
Over discharge Over charge	N/A	No burst	60mA (0. 2C) discharge	
	N/A	No burst	120mA (0. 4C) charge 5 hours	
	N/A	No leakage nor explosion	30mA (0.1C) charge 10 hours	
Charge Retention	mAh	$\geq 270(90\%)$	Standard charge, storage for 30 days, standard discharge	25 $^\circ\text{C}$
	mAh	$\geq 250(85\%)$	Standard charge, storage for 7 days, standard discharge	40 $^\circ\text{C}$
IEC Cycles Test	cycle	>500	IEC 285 (1993) 4.4.1	
Short Circuit	N/A	Deformation & leakage may occur but no explosion	After standard charge, short circuit for 30 min (lead wire = 0.5mm ² x 20mm)	
Vibration Resistance	N/A	$\Delta V < 0.08\text{V}$	Charge at 0.1C for 10 hrs, then leave for 24 hrs. Check battery before / after vibration Amplitude: 1.5mm, Vibration: 3000CPM (any direction for 60 mins)	
Impact Resistance	N/A	$\Delta V < 0.08\text{V}$	Charge at 0.1C for 10 hrs, then leave for 24 hrs. Check battery before / after drop the wooden board of thickness: 30 mm Height: 50 cm, test for 3 times. Direction is not specified	

4. Configurations, Dimensions And Markings

Please refer to the related drawing.

5. External Appearance

The cell / battery shall be free from cracks, scars, breakage, rust, discoloration, leakage and deformation.

6. Warranty

One year limited warranty against workmanship and material defect.

7. Cautions

1. Reverse charging is not acceptable.
2. Charge before use.
3. Do not charge / discharge with more than the specified current.
4. Do not short circuit the cell / battery.
5. Do not incinerate or mutilate the cell / battery.
6. Do not solder directly to the cell / battery.
7. The life expectancy may be reduced if the cell / battery is subjected to adverse conditions, like extreme temperature, deep cycling, excessive overcharge/ over-discharge.
8. Store the cell / battery in a cool dry place.
9. Keep away from children. If swallowed, contact a physician at once

8. Company Info

Shenzhen Lionik Battery Co.,Ltd. China

Tel: +86-755-27897001 755-27803562

Fax:+86-755-27837127

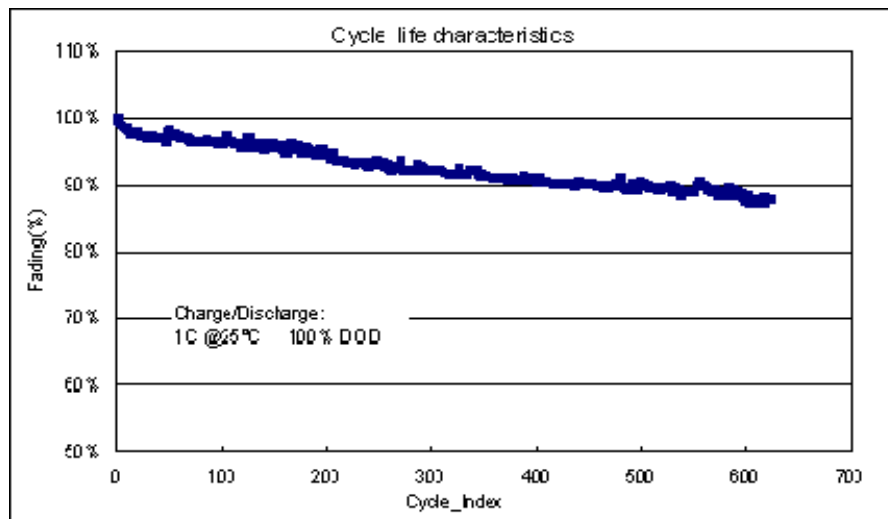
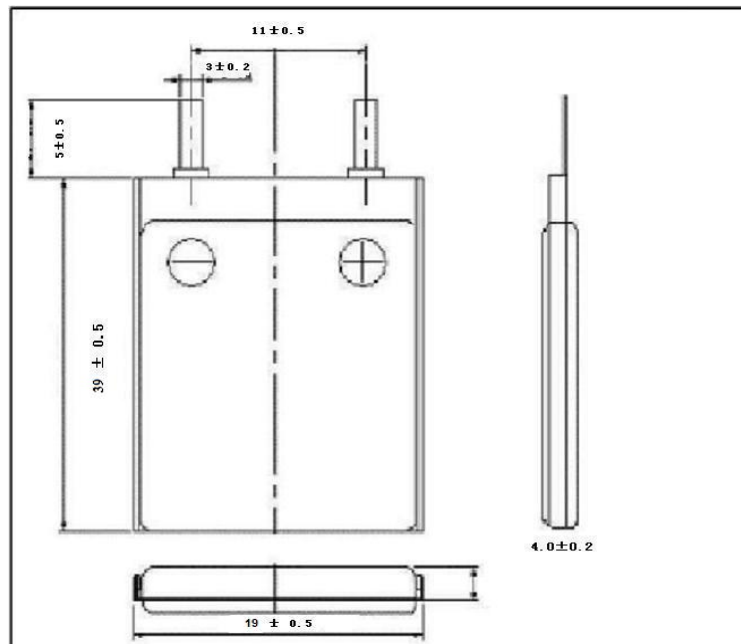
Website:<http://www.lionik.com> (English version)

<http://www.lionikbattery.com> (English & Chinese version)

E-Mail: sales@lionik.com; sales@lionikbattery.com;

Adress:B8, Fudong Industrial Garden, Xixiang, BaoAn,Shenzhen,China

Cell Dimension Drawing (unit: mm)



Model: **041939**

