



Lithium-ion
Rechargeable
Batteries

Technical Data Sheet

PD3048

www.powercellkorea.com

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Korea PowerCell Inc.

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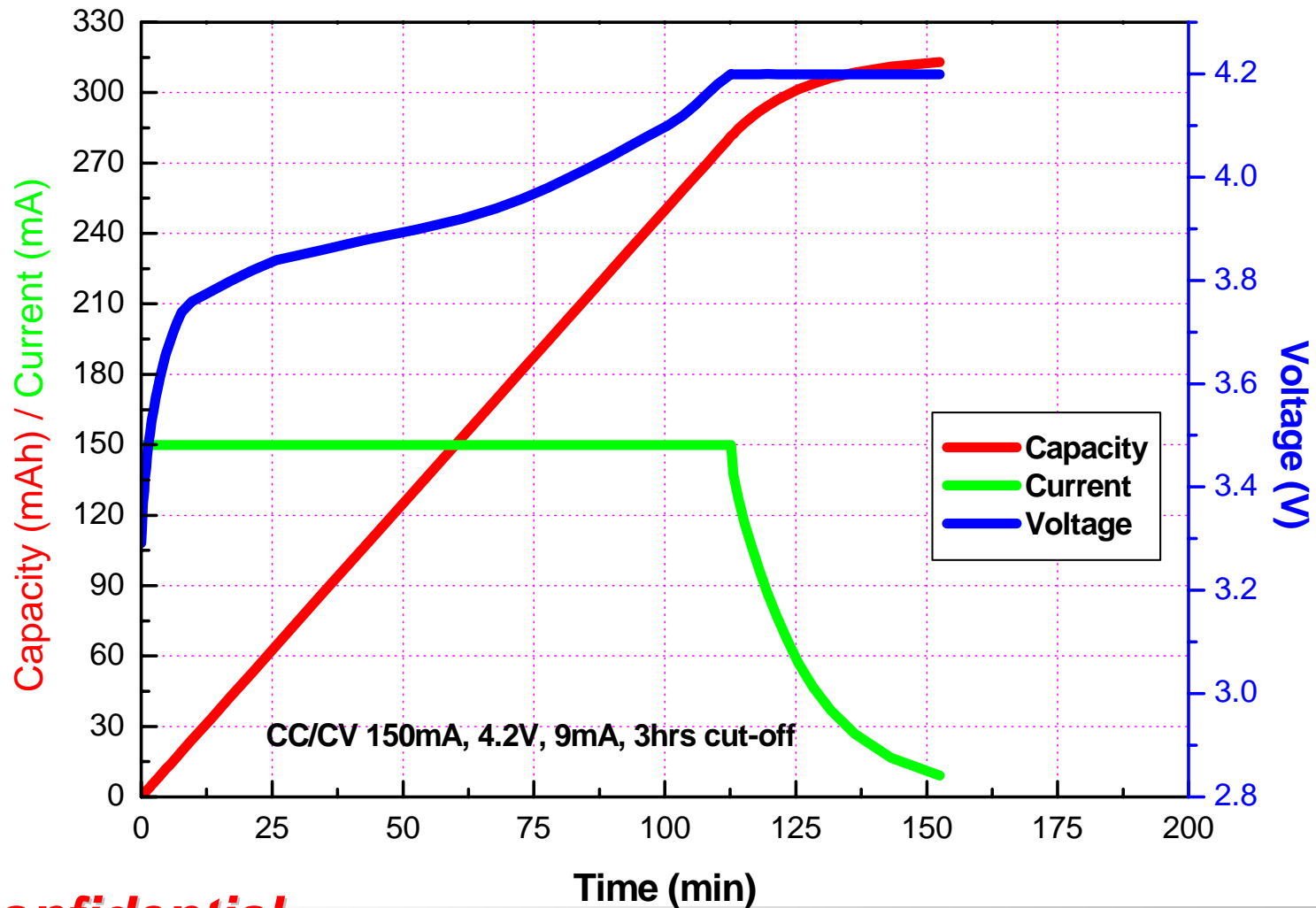
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1. Specification

Model		PD 3048
Nominal Capacity		300 mAh (0.2C, 3.0V Cut-off)
Nominal Voltage		3.7 V
Dimension	Thickness	4.8 ± 0.2 mm (center)
	Diameter	30.0 ± 0.2 mm
Charge Method		CC-CV
Charge Voltage		4.2 V
Charge Current		Standard 150 mA (End - Current : 9~30mA)
Discharge Current		Standard 150 mA, Max. 600mA
Discharge end voltage		3.0 V
Discharge Temperature		- 20°C ~ + 60°C
Internal Impedance		Max. 400 mohm
Weight		approx 9.3g

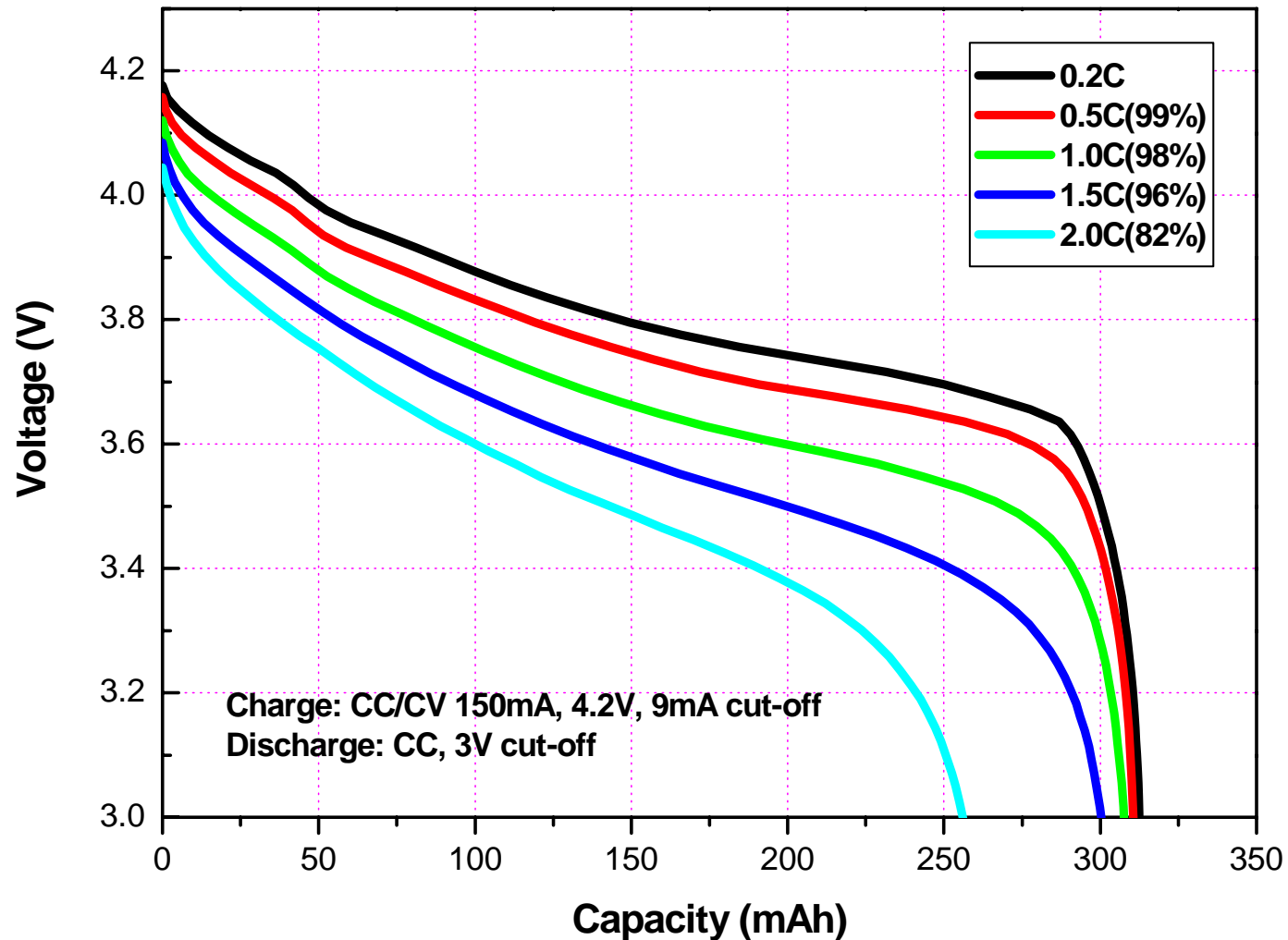
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2.1. Charge Characteristics – 0.5C at 25



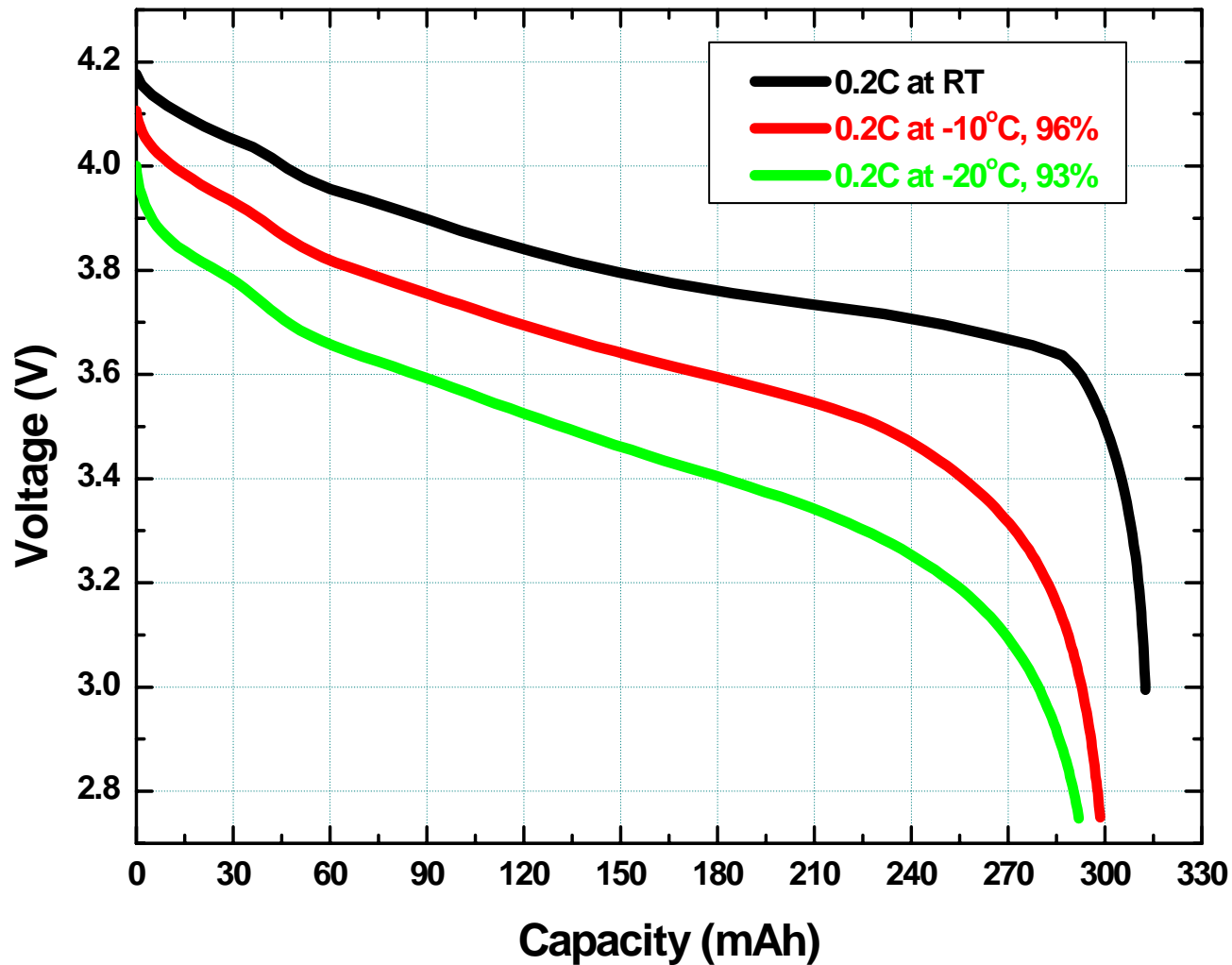
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2.2. Discharge Characteristics at 25



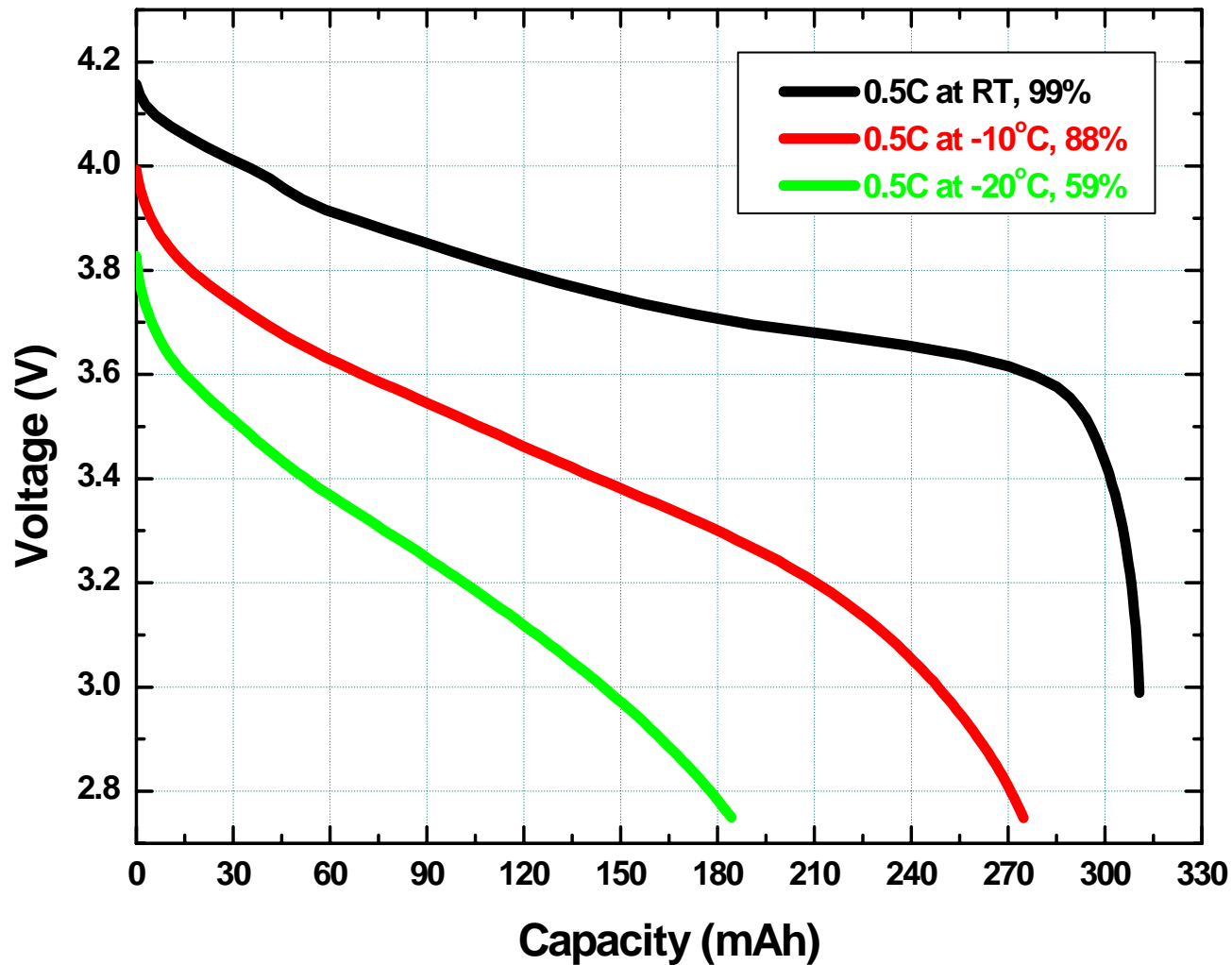
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2.3. 0.2C Discharge at low temperature



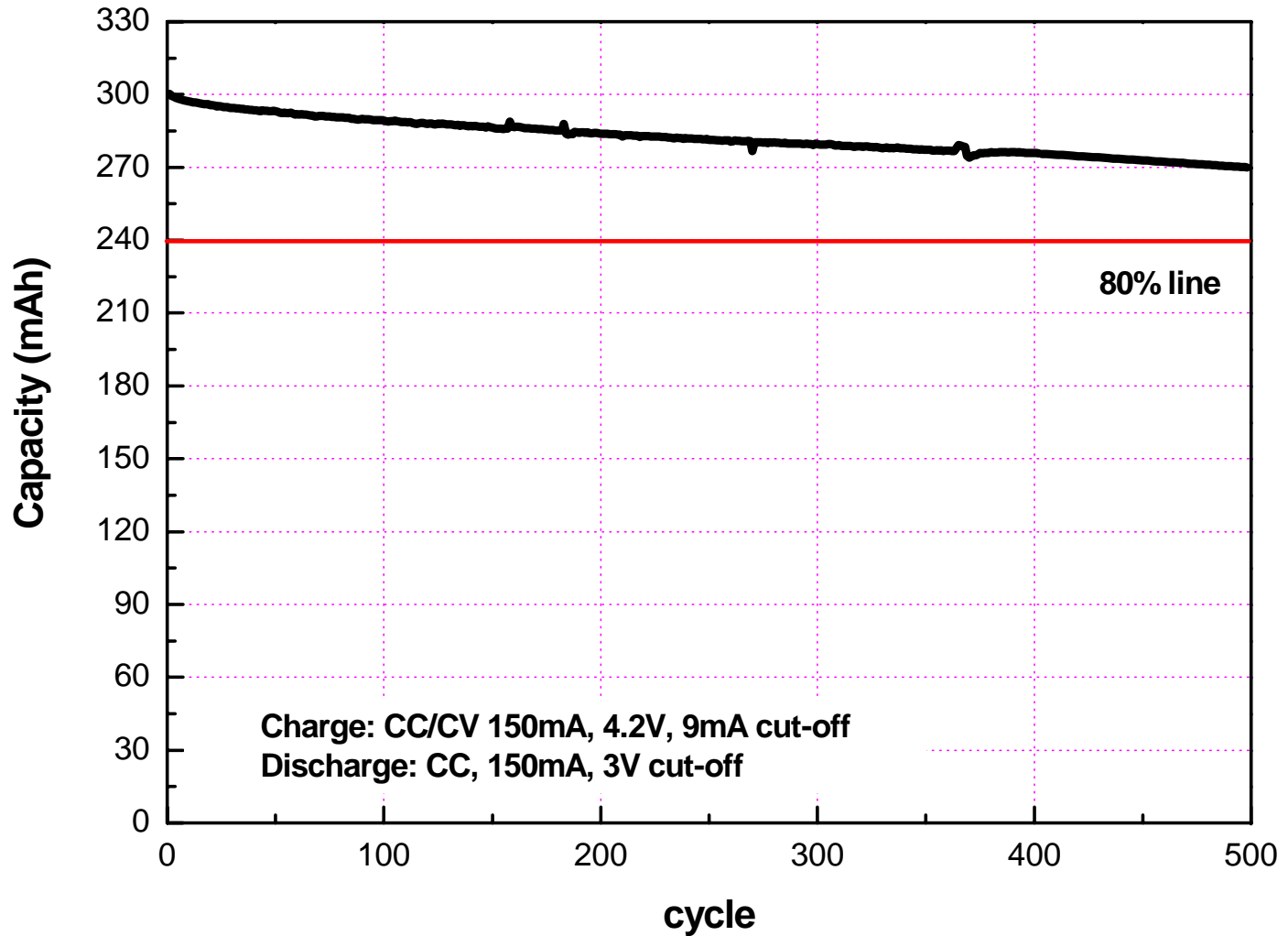
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2.4. 0.5C Discharge at low temperature



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2.5. Cycle life – 0.5C charge/ 0.5C discharge



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3.1. High temperature storage Test (90 °C, 4hr)

** Average of 4 samples.*

	Before storage	After storage	Δ
Weight, g	9.3023	9.3007	0.02%
Thickness, mm (at 90°C)	4.764	4.935	3.59%
Thickness, mm (at RT)	4.764	4.841	1.62%
Residual capacity, mAh	305	270	86%
Recovery capacity, mAh	305	284	93%

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3.2. Humidity test (60 °C, 90% RH, 1week)

** Average of 4 samples.*

	Before storage	After storage	Δ
Weight, g	9.3001g	9.2946g	0.06%
Thickness, mm (at RT)	4.737	4.782	0.95%
Residual capacity, mAh	304	266	88%
Recovery capacity, mAh	304	290	95%

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4. Safety test

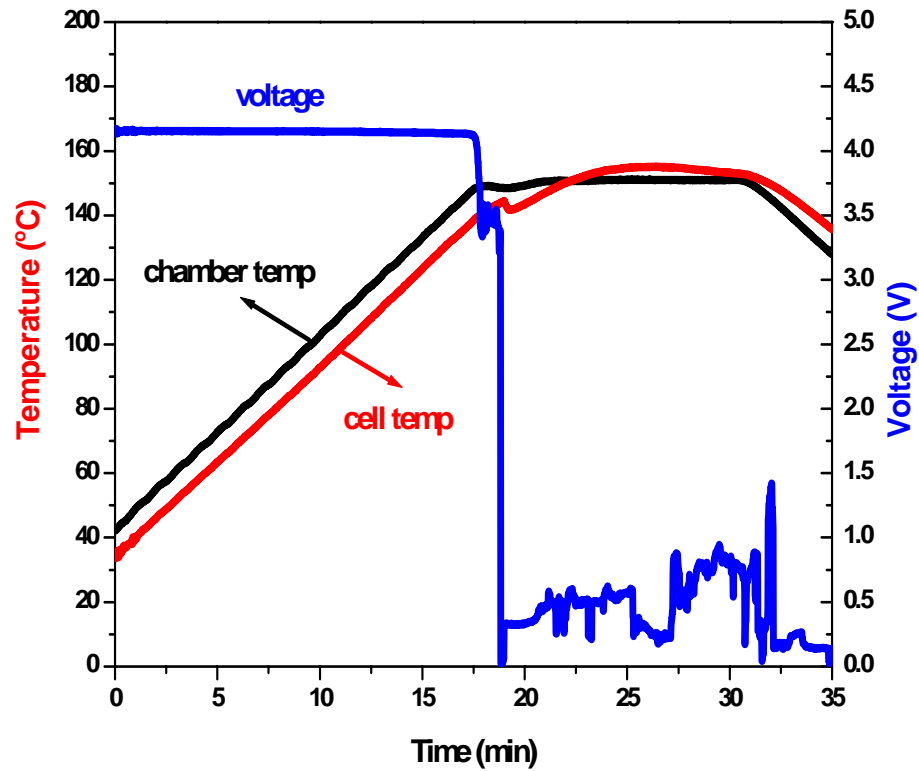
Test	comment
Hot box test (150oC, 10min)	NF, NE, NV
Nail test (2.5mm nail)	NF, NE, NV
Short circuit test	NF, NE, NV
Overcharge test (1.5C, 250% charge)	NF, NE, NV

** NF= no fire, NE= no explosion, NV=no vent*

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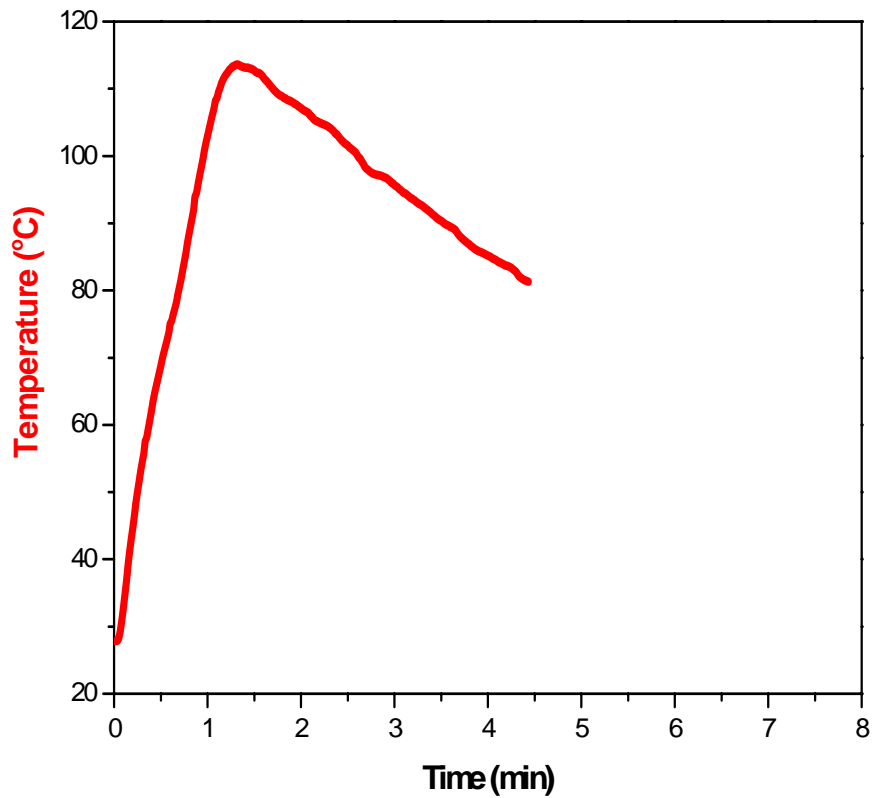
4.1. Hot-Box Test (150 °C, 10min)



<after test>

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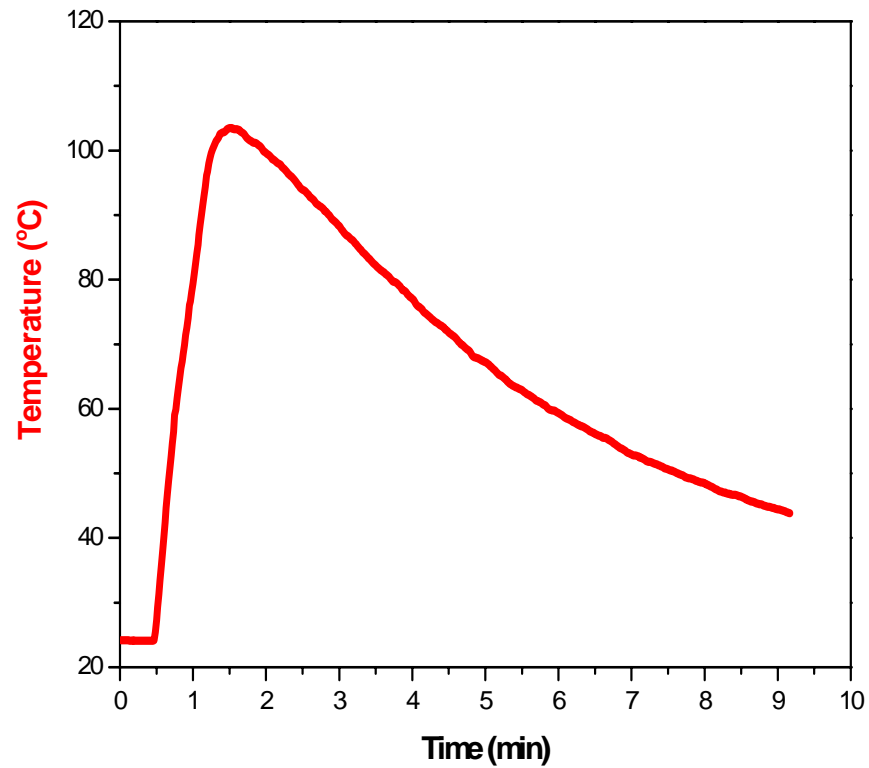
4.2. Nail Penetration Test



<after test>

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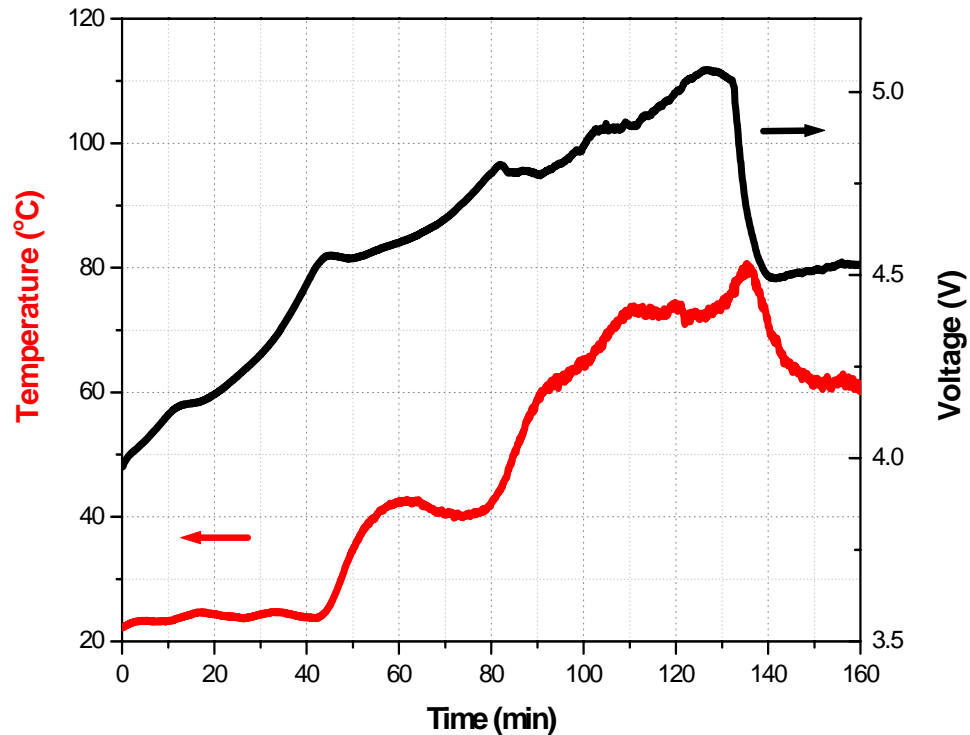
4.3. Short circuit Test



<after test>

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4.4. Overcharge test (1.5C continuous overcharge)



<after test>

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