



Lithium-ion
Rechargeable
Batteries

Technical Data Sheet PD2430

www.powercellkorea.com

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Korea PowerCell Inc.

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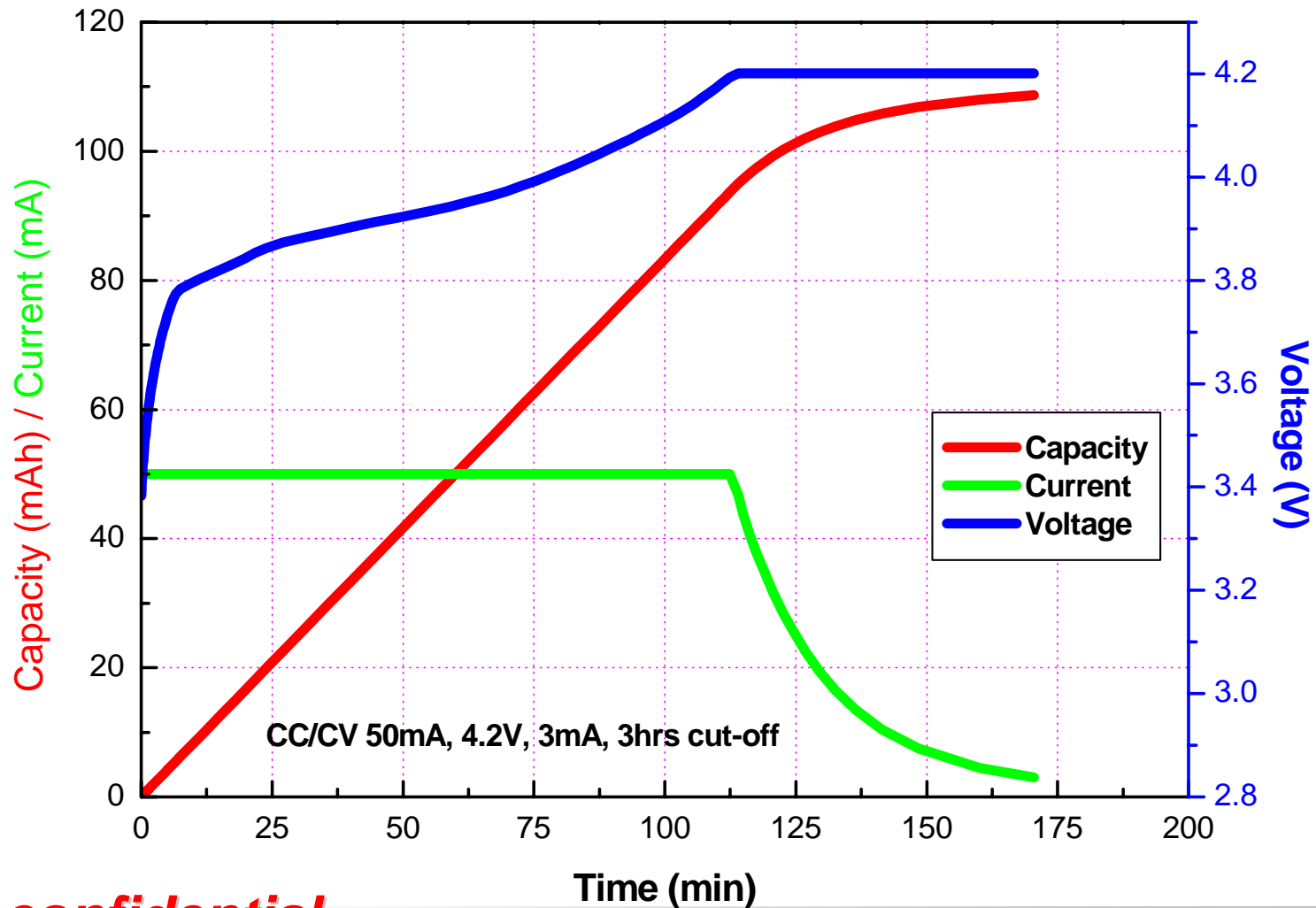
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1. Specification

Model		PD 2430
Nominal Capacity		100 mAh (0.2C, 3.0V Cut-off)
Nominal Voltage		3.7 V
Dimension	Thickness	3.1 ± 0.2 mm (center)
	Diameter	24.5 ± 0.2 mm
Charge Method		CC-CV
Charge Voltage		4.2 V
Charge Current		Standard 50 mA,, (End - Current : 3~10mA)
Discharge Current		Standard 50 mA, Max. 200mA
Discharge end voltage		3.0 V
Discharge Temperature		- 20°C ~ + 60°C
Internal Impedance		Max. 700 mohm
Weight		approx 4.5g

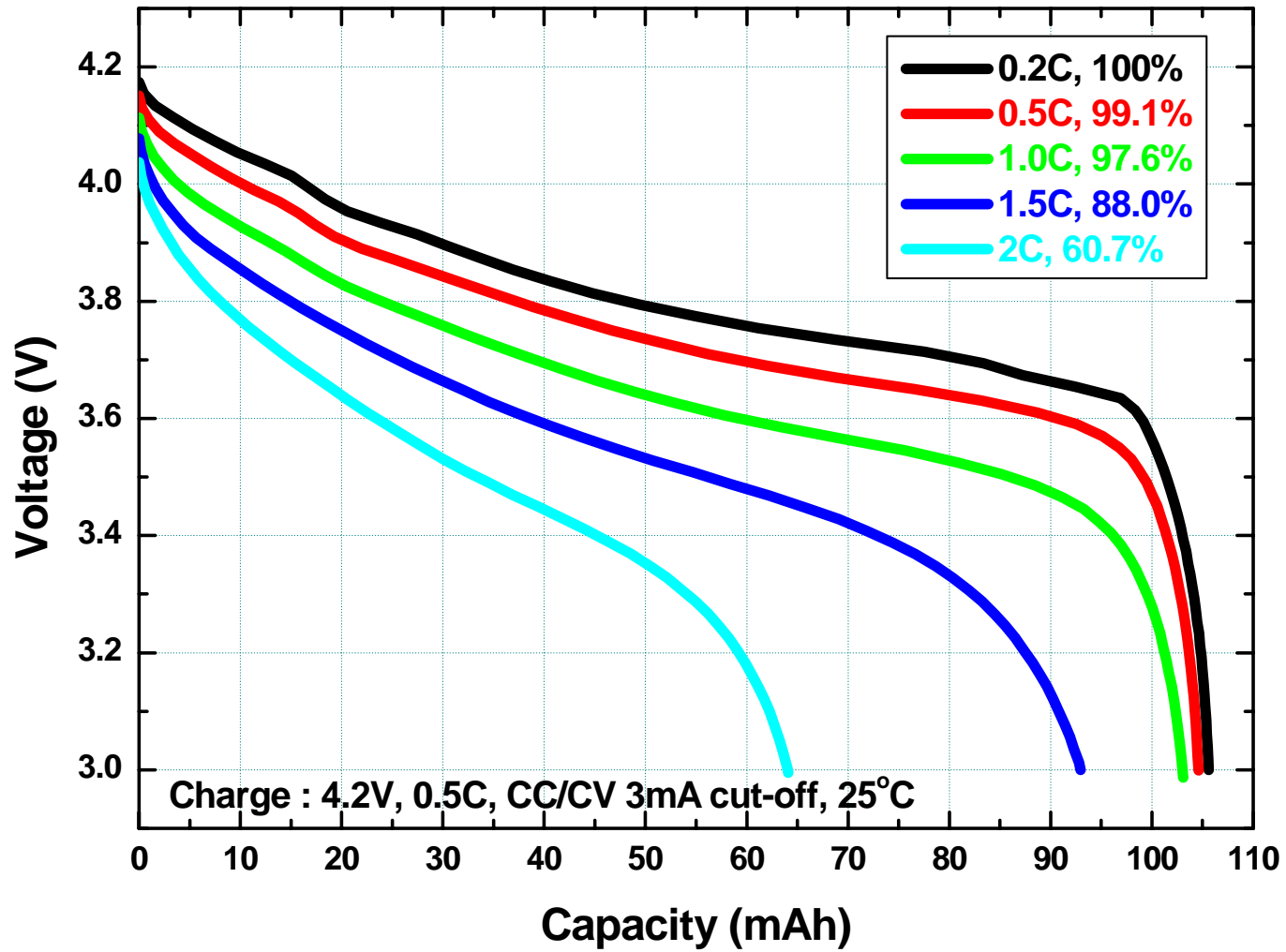
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2.1. Charge Characteristics – 0.5C at 25



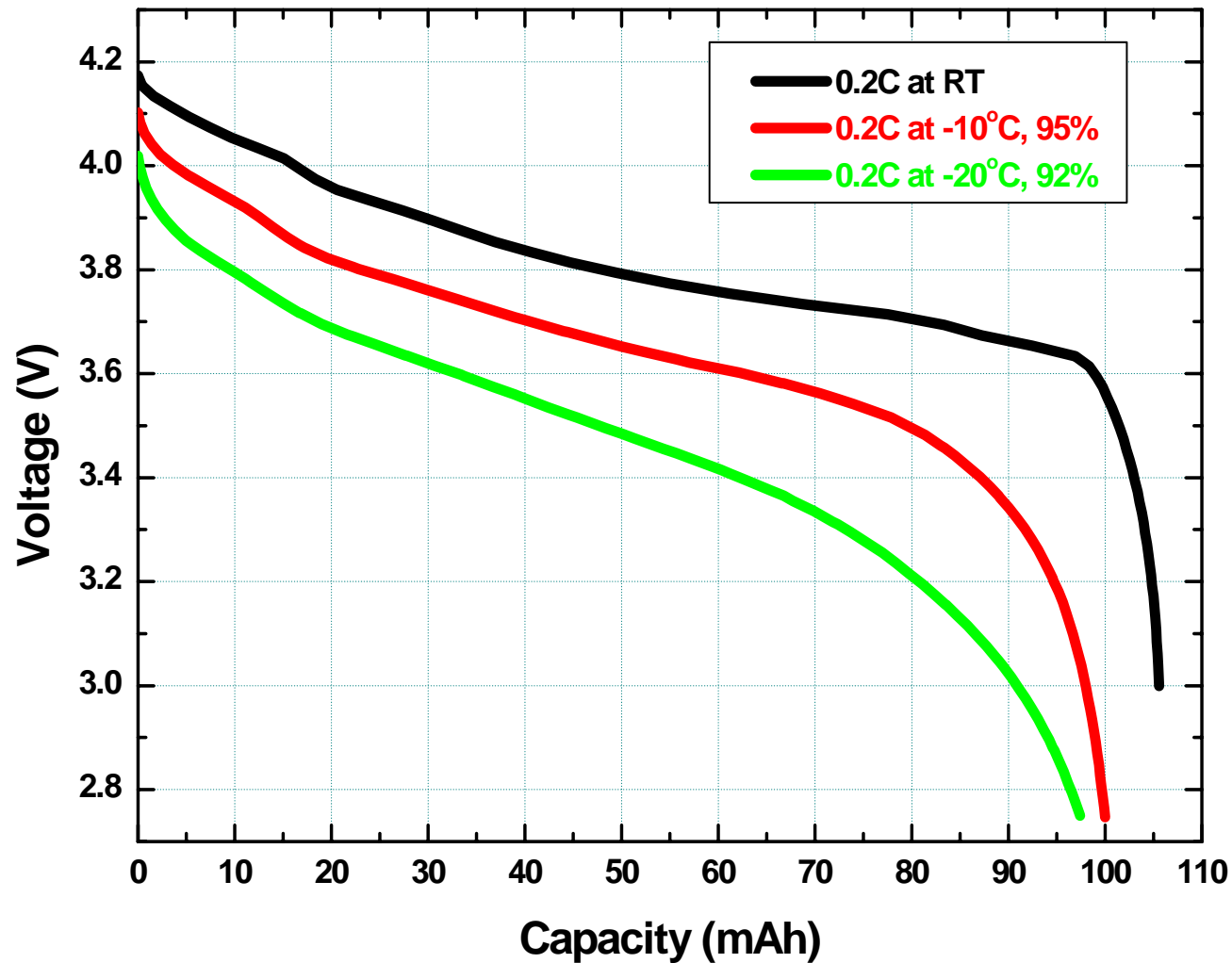
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2.2. Discharge Characteristics at 25



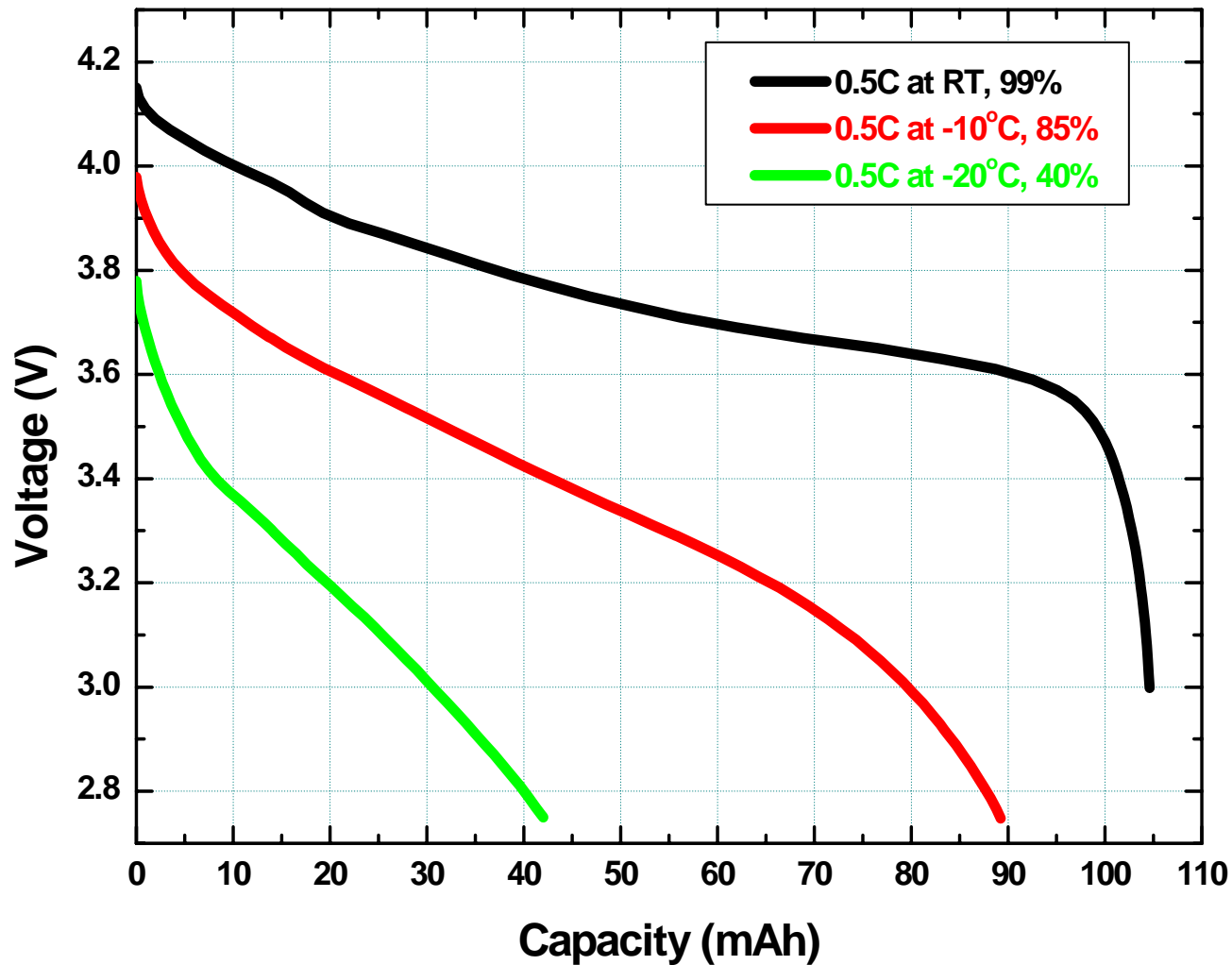
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2.3. 0.2C Discharge at low temperature



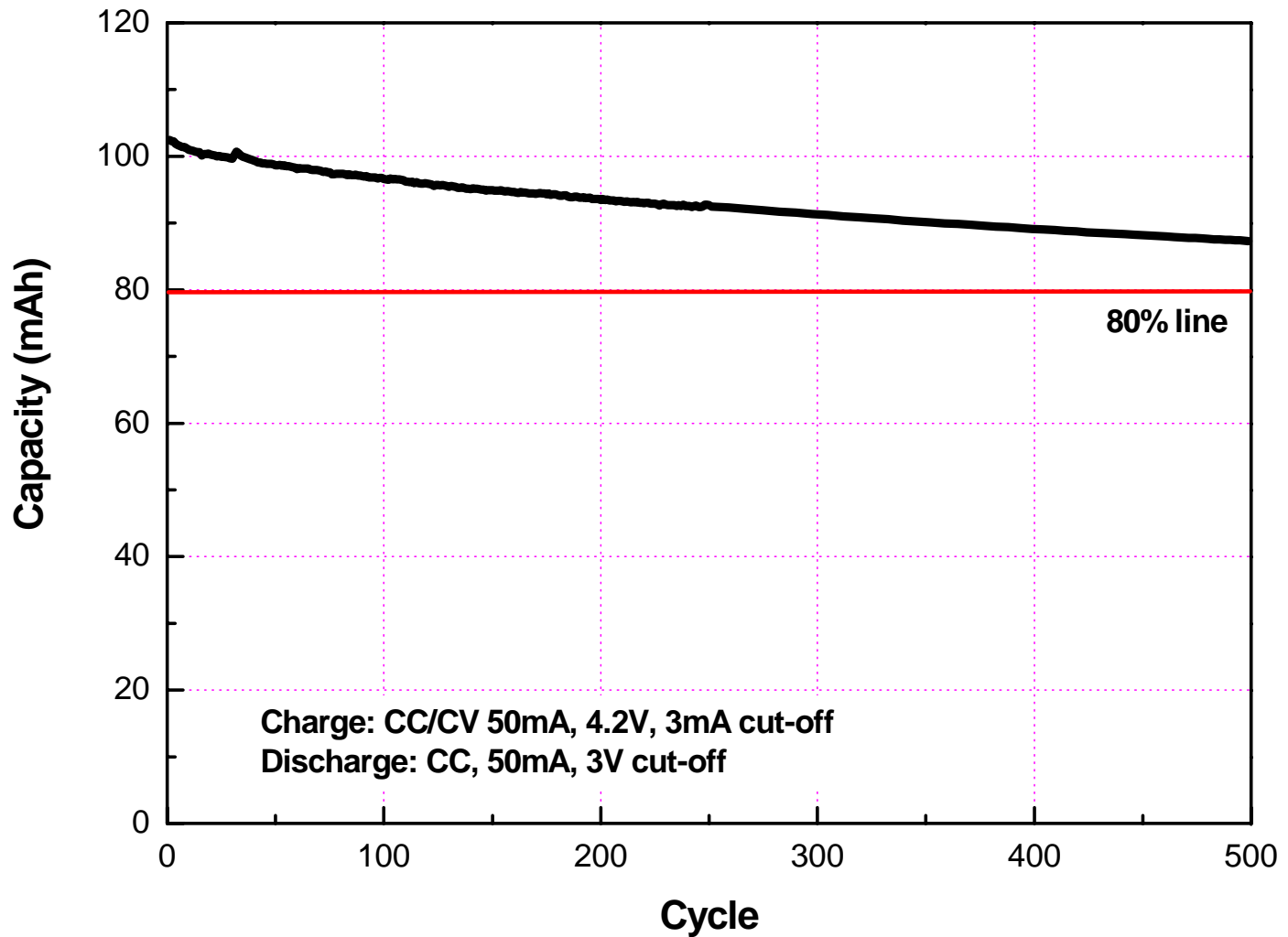
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2.4. 0.5C Discharge at low temperature



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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 5 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	4.3822	4.3821	0.00%	0.00
Thickness, mm (at 90°C)	3.025	3.099	2.45%	0.42
Thickness, mm (at RT)	3.025	3.067	1.40%	0.15
Residual capacity, mAh	104	95	92%	0.62
Recovery capacity, mAh	104	99	96%	0.52

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

** Average of 5 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	4.3939	4.3925	0.03%	0.00
Thickness, mm (at RT)	3.048	3.093	1.50%	0.24
Residual capacity, mAh	104	92	88%	1.69
Recovery capacity, mAh	104	98	94%	1.46

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3.3. Thermal shock test(-40 °C/60 °C, 10 cycles)

** Average of 5 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	4.3940	4.3937	0.01%	0.00
Thickness, mm (at RT)	3.059	3.091	1.05%	0.14
Residual capacity, mAh	103	100	97%	N.A
Recovery capacity, mAh	103	102	99%	N.A

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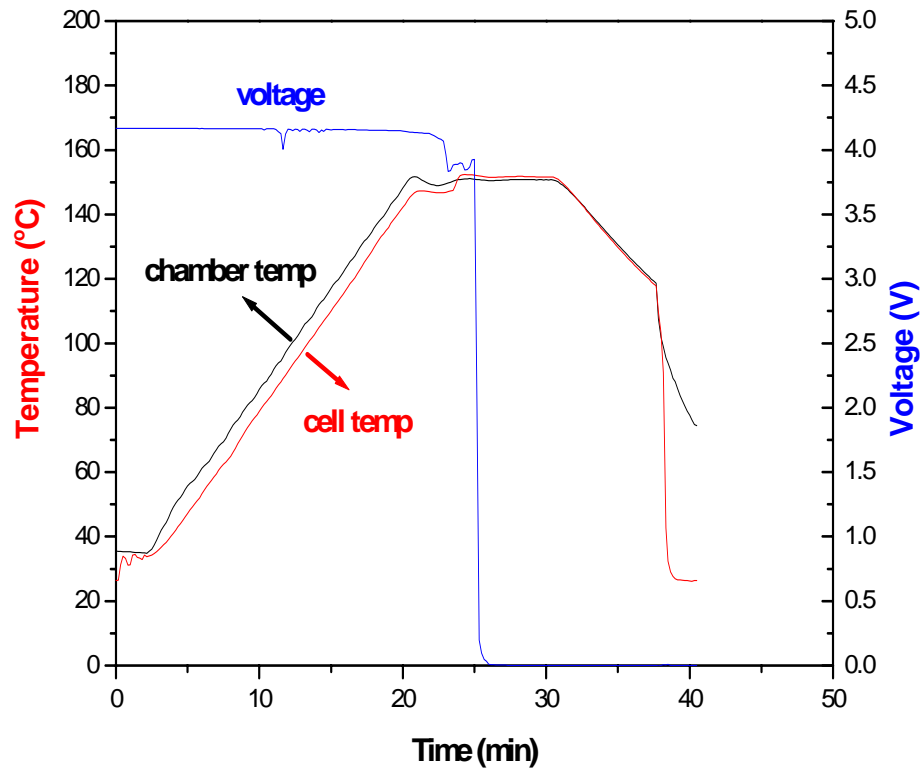
4. Safety test

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 (3C, 250% charge)	NF, NE, NV

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

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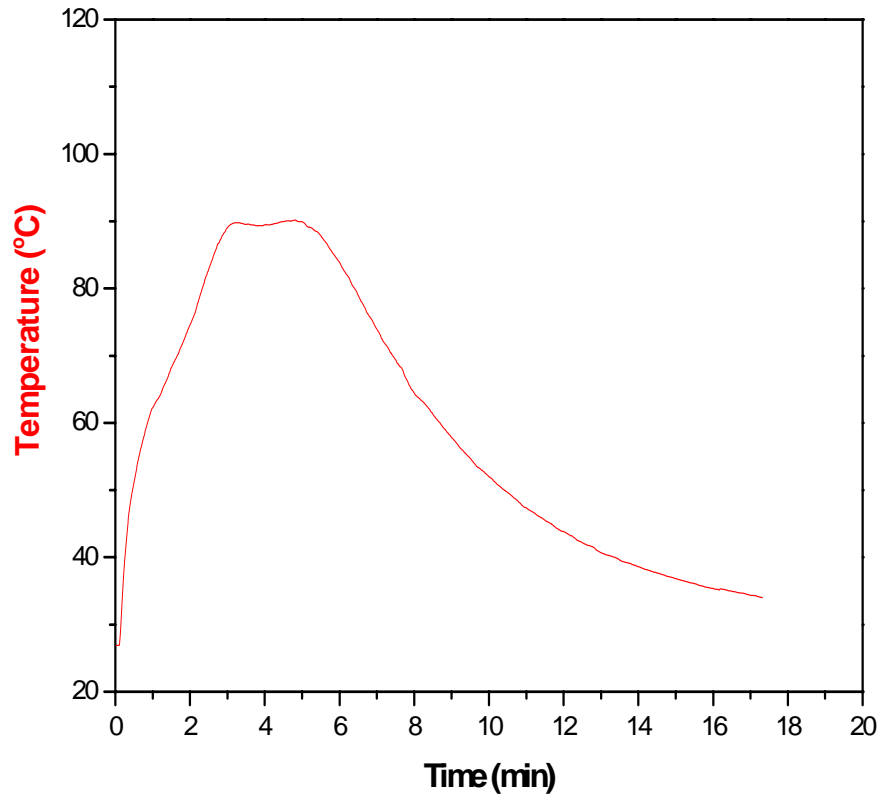
4.1. Hot-Box Test (150 °C, 10min)



<after test>

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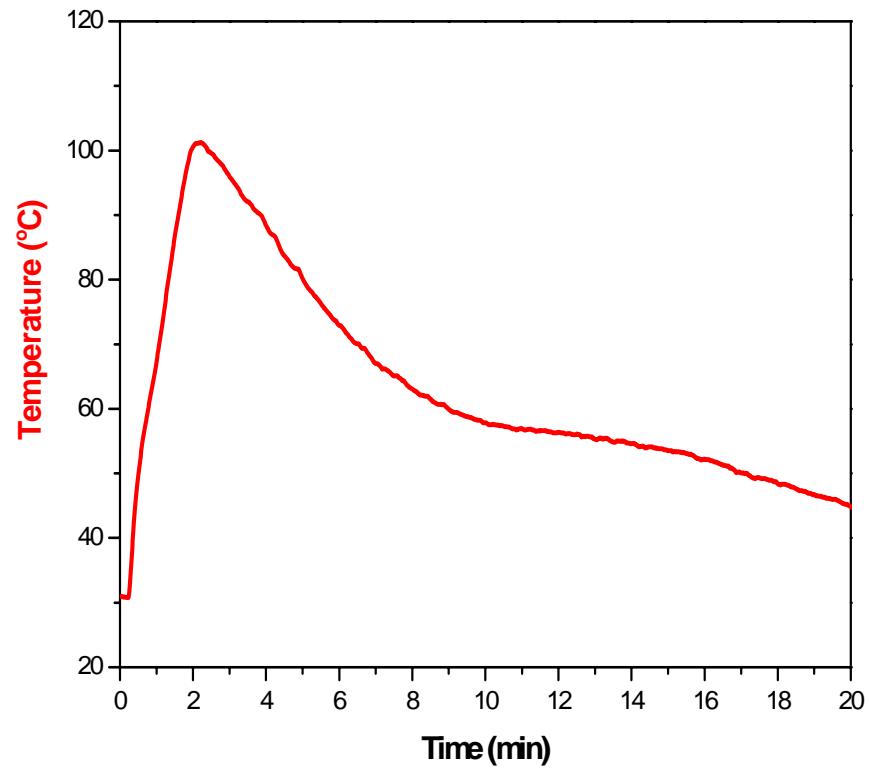
4.2. Nail Penetration Test



<after test>

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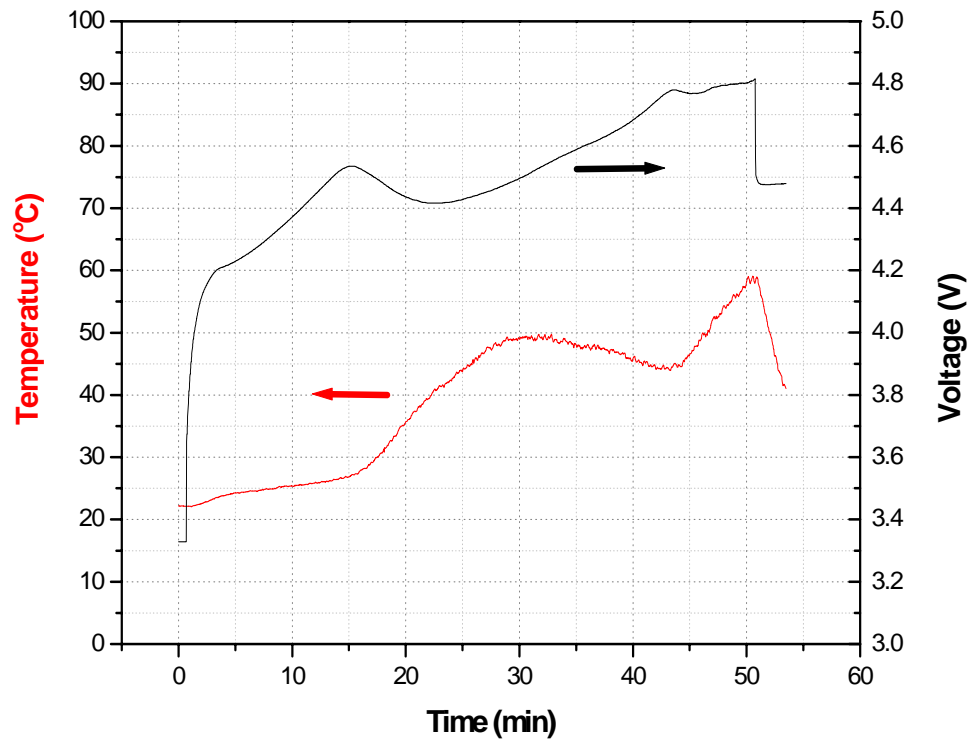
4.3. Short circuit Test



<after test>

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4.4. Overcharge test (3C continuous overcharge)



<after test>

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