



Lithium-ion
Rechargeable
Batteries

Technical Data Sheet PD2440

www.powercellkorea.com

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Korea PowerCell Inc.

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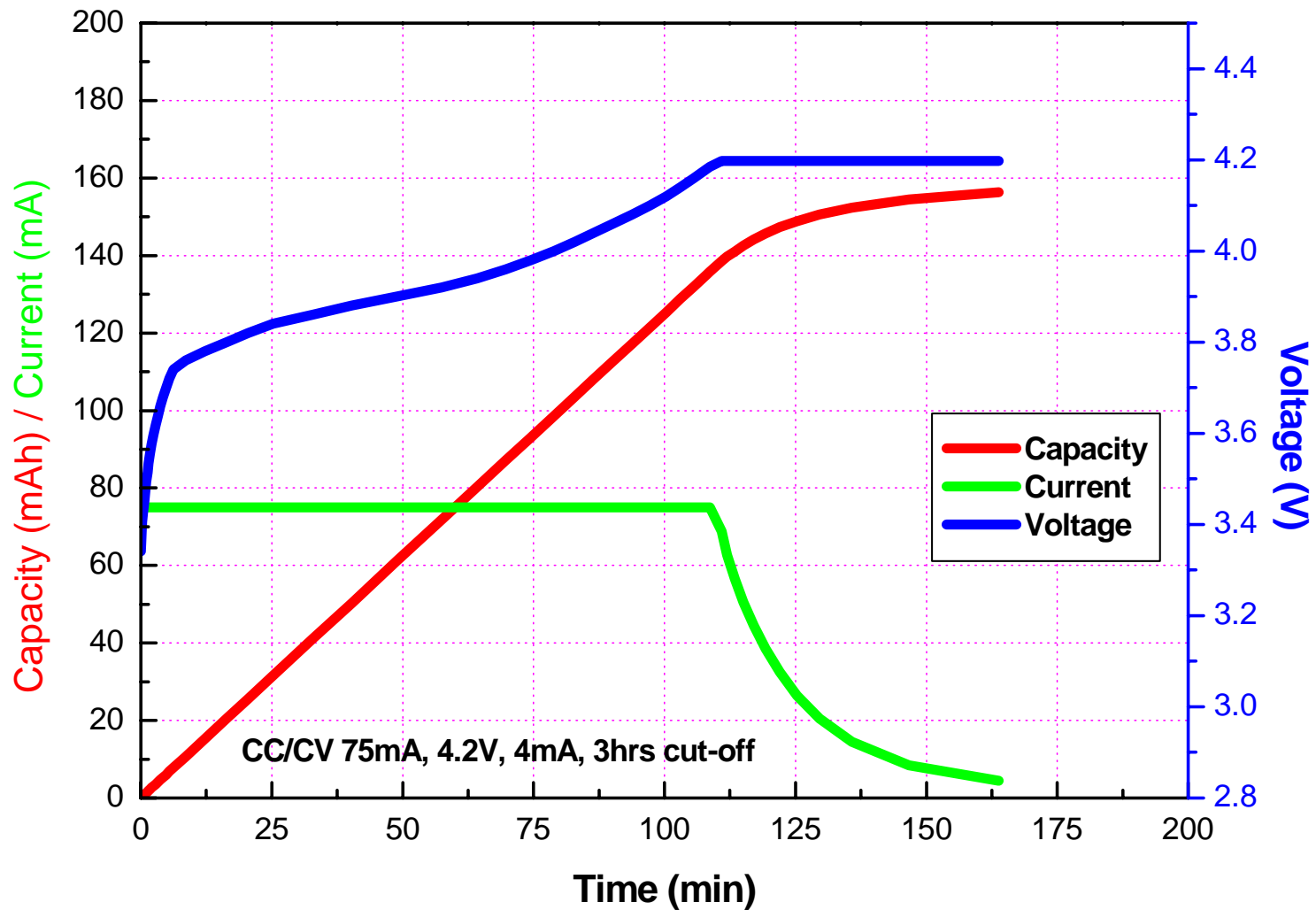
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1. Specification

Model		PD 2440
Nominal Capacity		150 mAh (0.2C, 3.0V Cut-off)
Nominal Voltage		3.7 V
Dimension	Thickness	4.2 ± 0.2 mm (center)
	Diameter	24.5 ± 0.2 mm
Charge Method		CC-CV
Charge Voltage		4.2 V
Charge Current		Standard 75 mA (End - Current : 4~15mA)
Discharge Current		Standard 75 mA, Max. 300mA
Discharge end voltage		3.0 V
Discharge Temperature		- 20°C ~ + 60°C
Internal Impedance		Max. 600 mohm
Weight		approx 5.4g

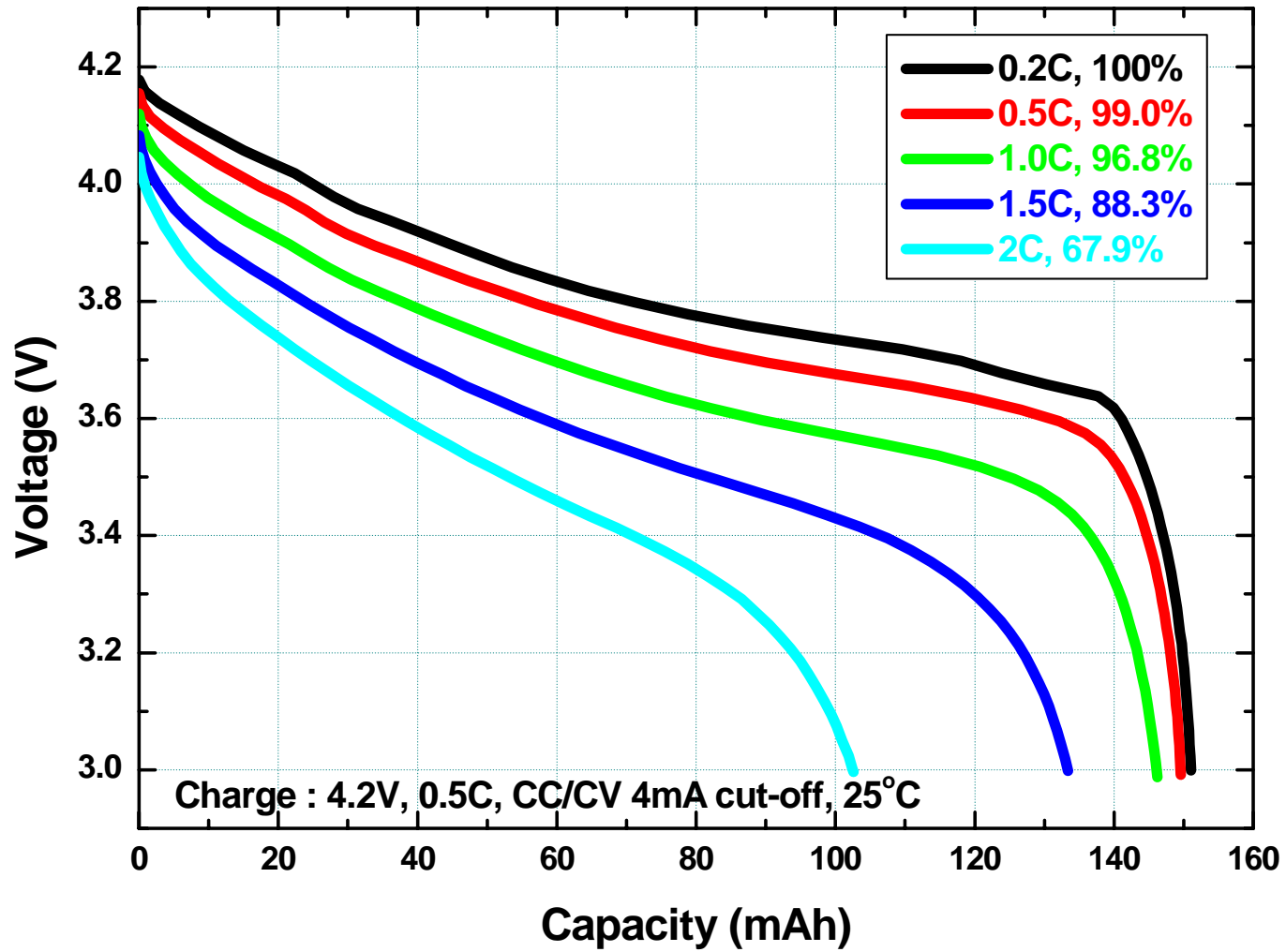
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2.1. Charge Characteristics – 0.5C at 25



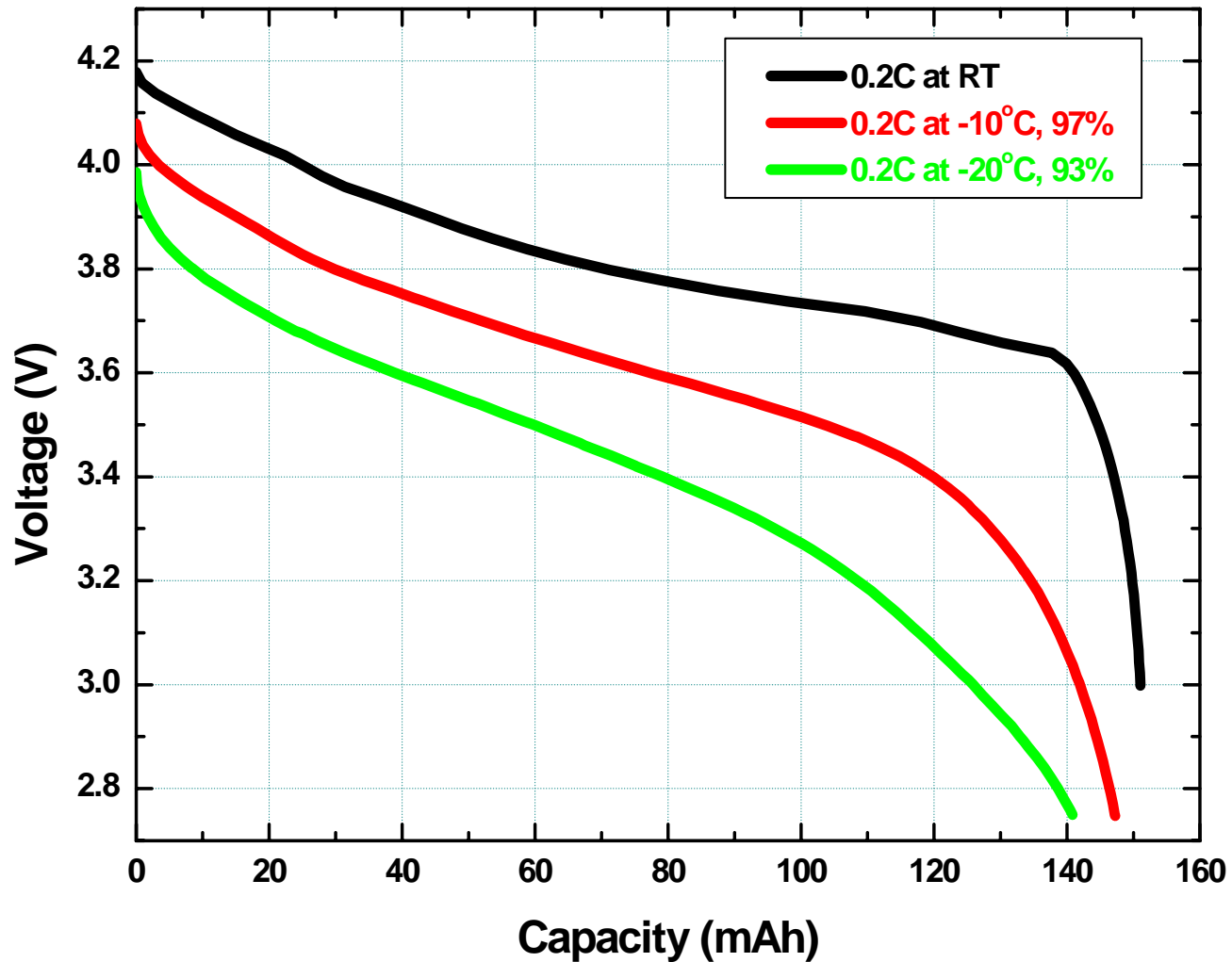
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2.2. Discharge Characteristics at 25



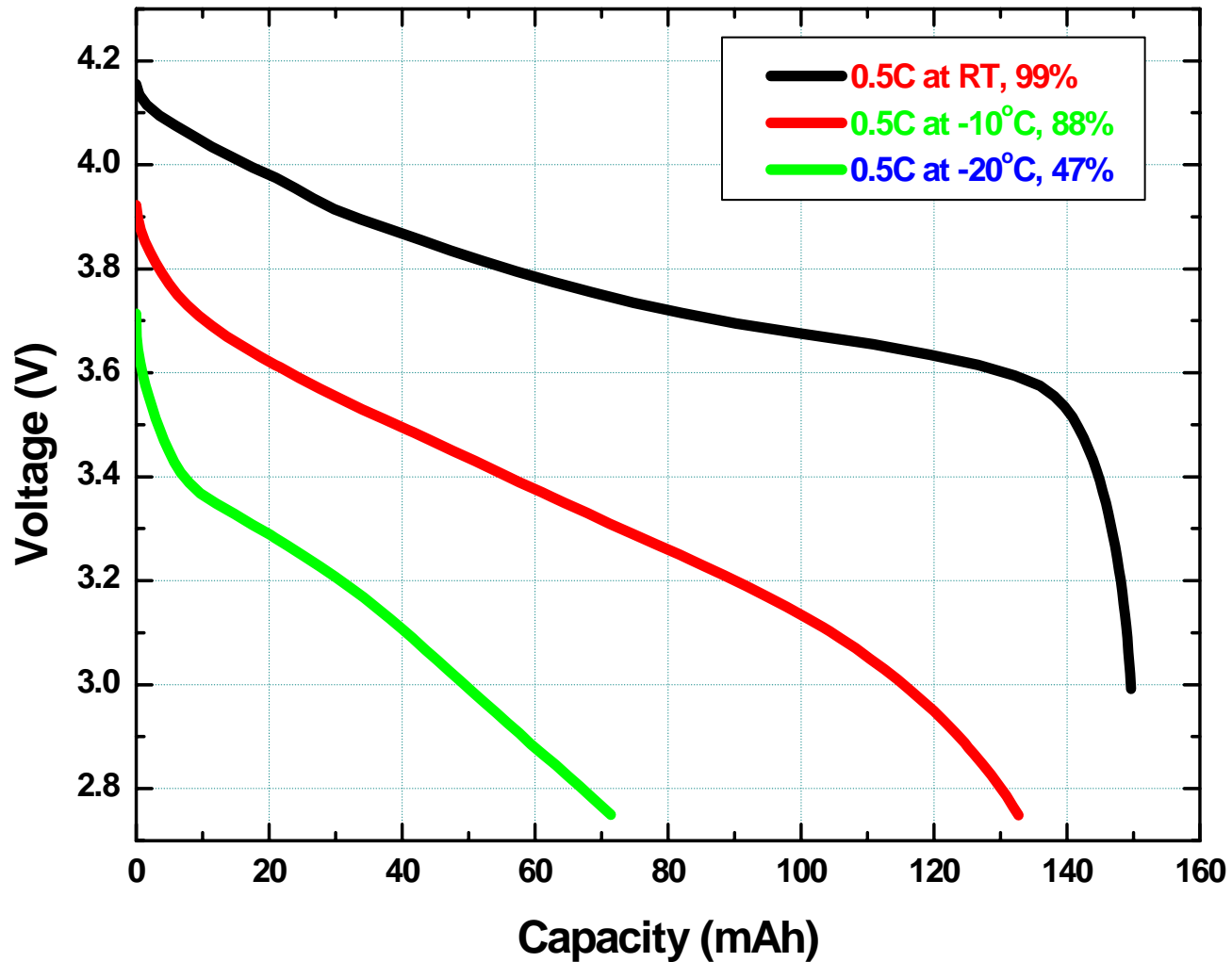
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2.3. 0.2C Discharge at low temperature



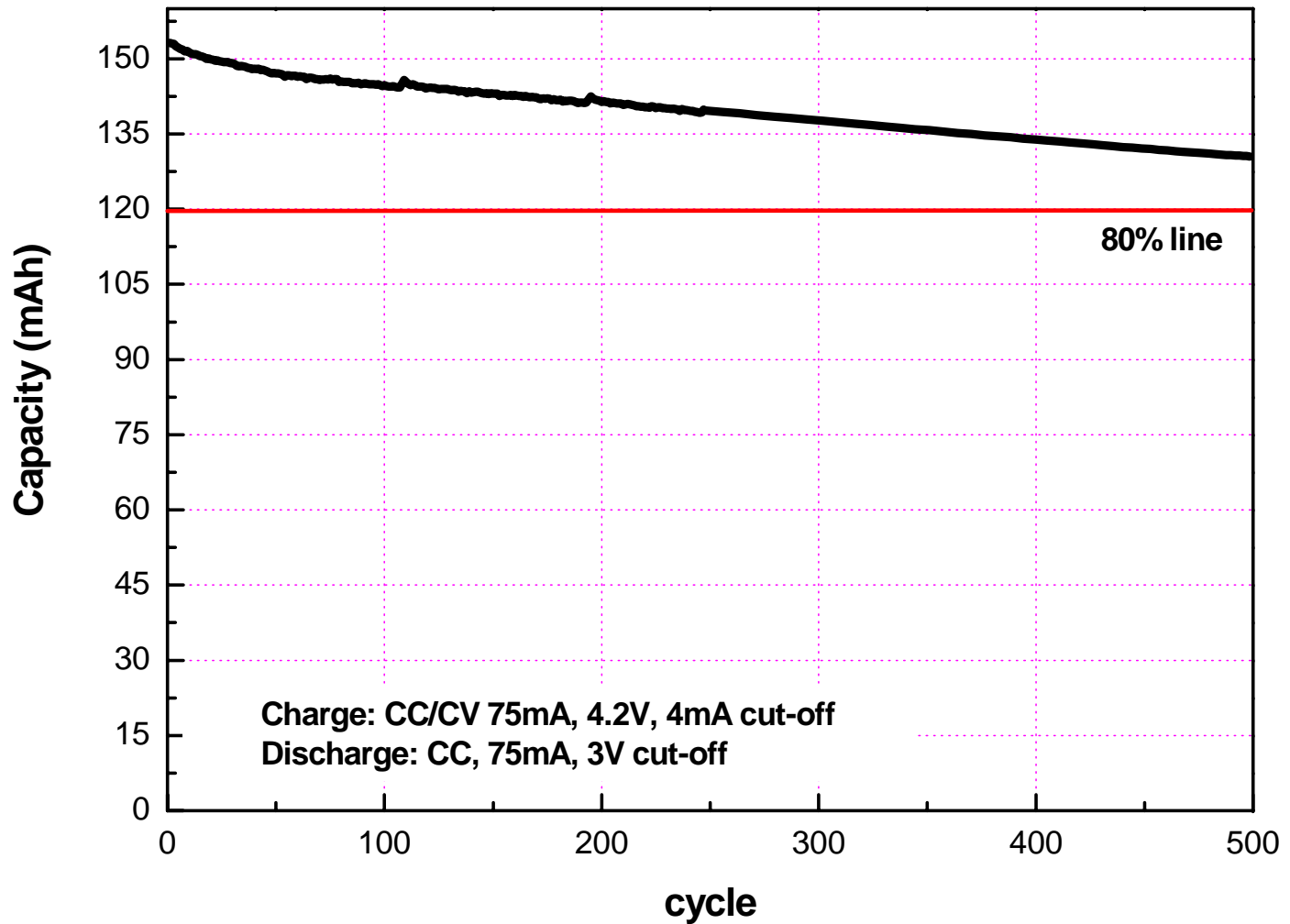
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2.4. 0.5C Discharge at low temperature



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



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

** Average of 10 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	5.4722	5.4720	0.00%	0.00
Thickness, mm (at 90°C)	4.169	4.264	2.28%	0.36
Thickness, mm (at RT)	4.169	4.223	1.30%	0.23
Residual capacity, mAh	153	139	91%	0.82
Recovery capacity, mAh	153	146	95%	0.68

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

** Average of 10 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	5.4685	5.4674	0.02%	0.00
Thickness, mm (at RT)	4.169	4.105	0.87%	0.18
Residual capacity, mAh	153	132	86%	0.71
Recovery capacity, mAh	153	144	94%	0.66

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

** Average of 10 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	5.4874	5.4869	0.01%	0.00
Thickness, mm (at RT)	4.320	4.366	1.06%	0.18
Residual capacity, mAh	153	149	97%	N.A
Recovery capacity, mAh	153	151	99%	N.A

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4. Safety test

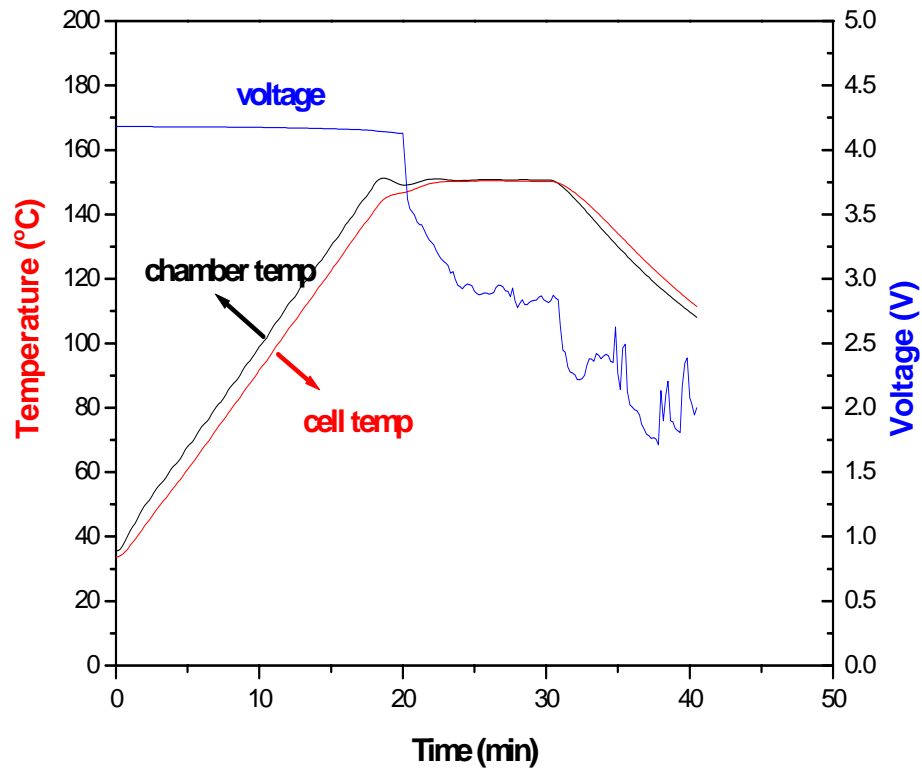
Test	comment
Hot box test (150oC, 10min)	NF, NE, NV
Nail test (2.5mm nail)	NF, NE, NV
Short circuit test	NF, NE, NV
Overcharge test (3C, 250% charge)	NF, NE, NV

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

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4.1. Hot-Box Test (150 °C, 10min)

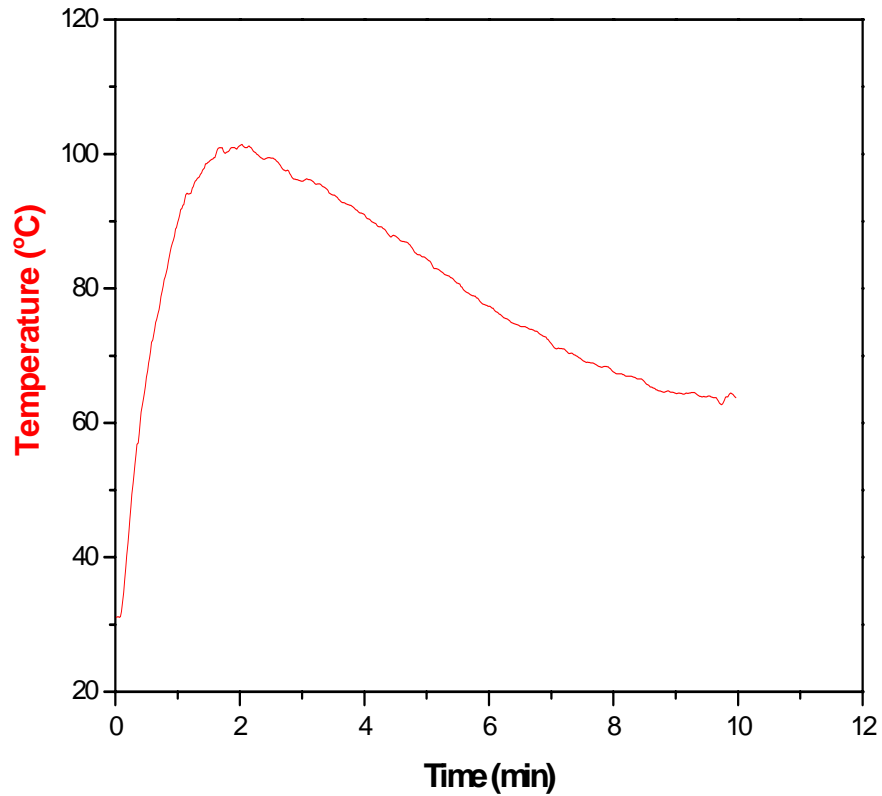


<after test>

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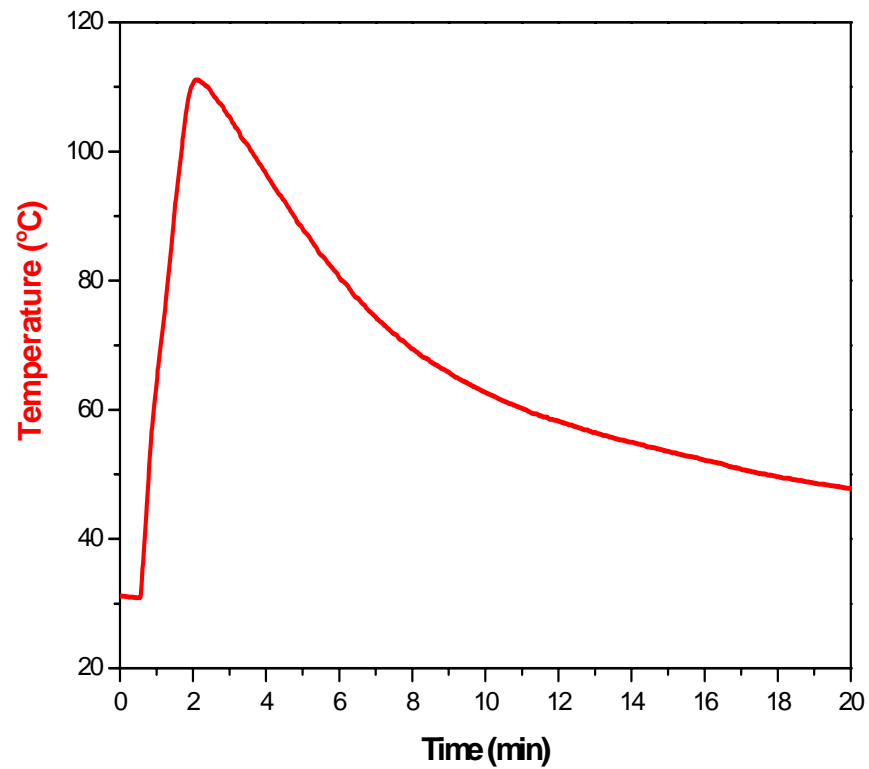
4.2. Nail Penetration Test



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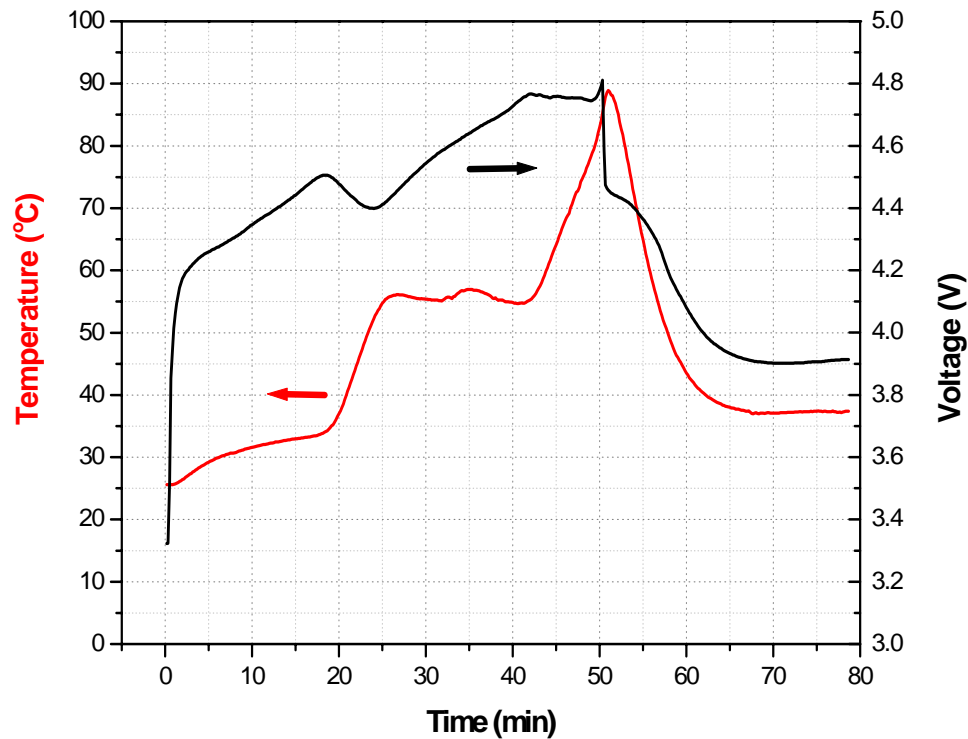
4.3. Short circuit Test



<after test>

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4.4. Overcharge test (3C continuous overcharge)



<after test>

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