



Lithium-ion
Rechargeable
Batteries

Technical Data Sheet ***PD2450***

www.powercellkorea.com

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Korea PowerCell Inc.

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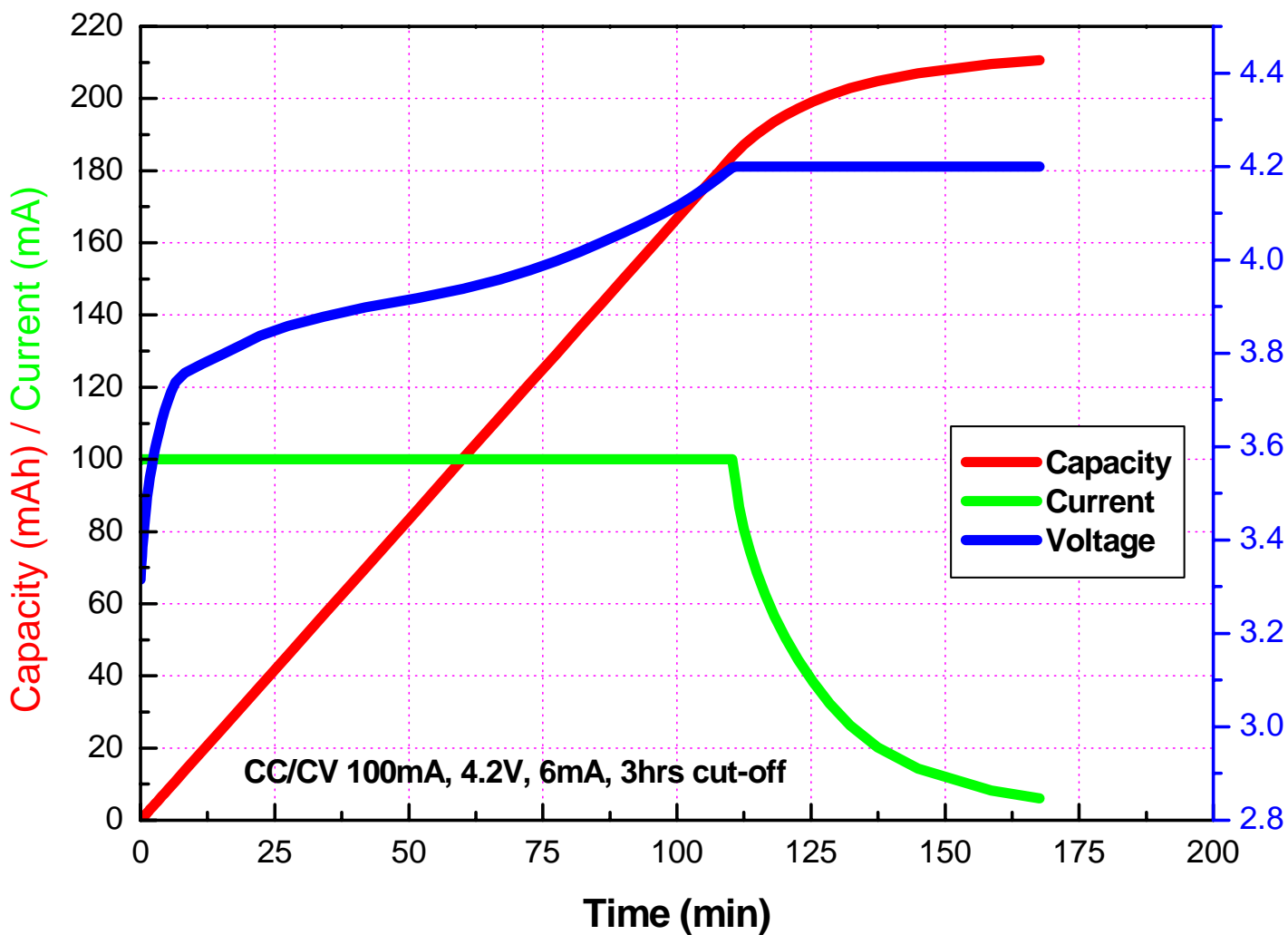
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1. Specification

Model		PD 2450
Nominal Capacity		200 mAh (0.2C, 3.0V Cut-off)
Nominal Voltage		3.7 V
Dimension	Thickness	5.2 ± 0.2 mm (center)
	Diameter	24.5 ± 0.2 mm
Charge Method		CC-CV
Charge Voltage		4.2 V
Charge Current		Standard 100 mA (End - Current : 6~20mA)
Discharge Current		Standard 100 mA, Max.400mA
Discharge end voltage		3.0 V
Discharge Temperature		- 20°C ~ + 60°C
Internal Impedance		Max. 600 mohm
Weight		approx 6.5g

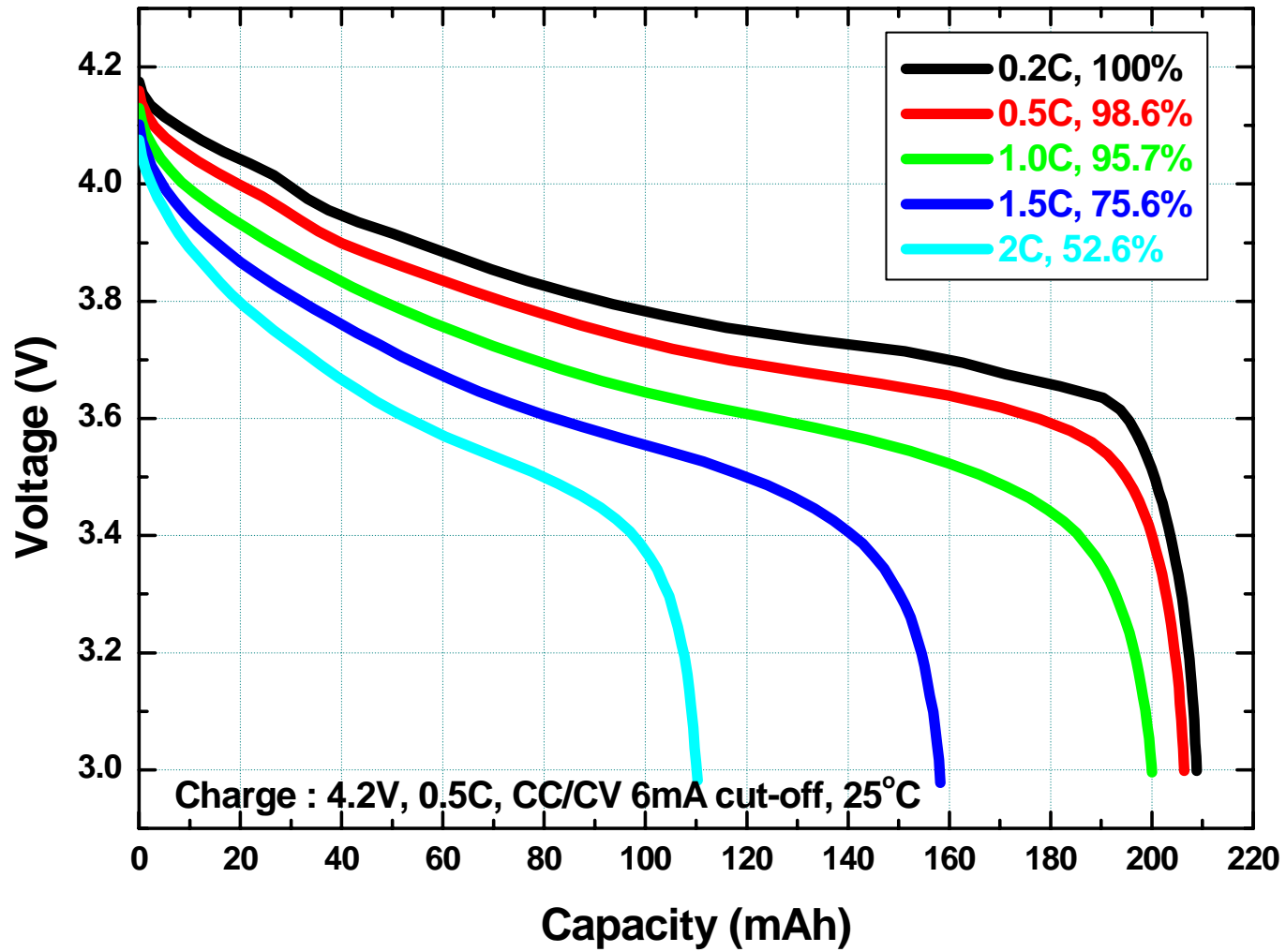
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2.1. Charge Characteristics – 0.5C at 25



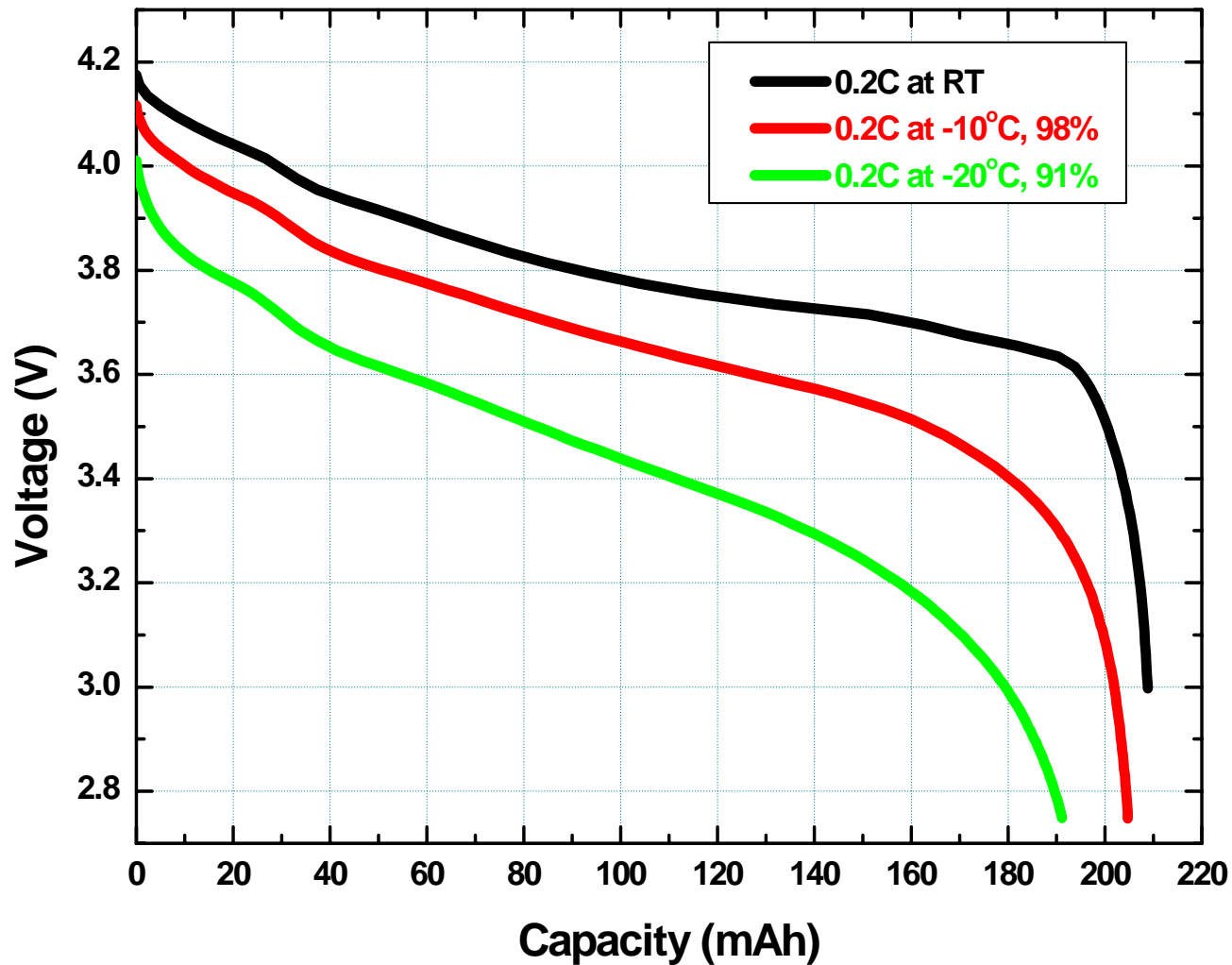
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2.2. Discharge Characteristics at 25



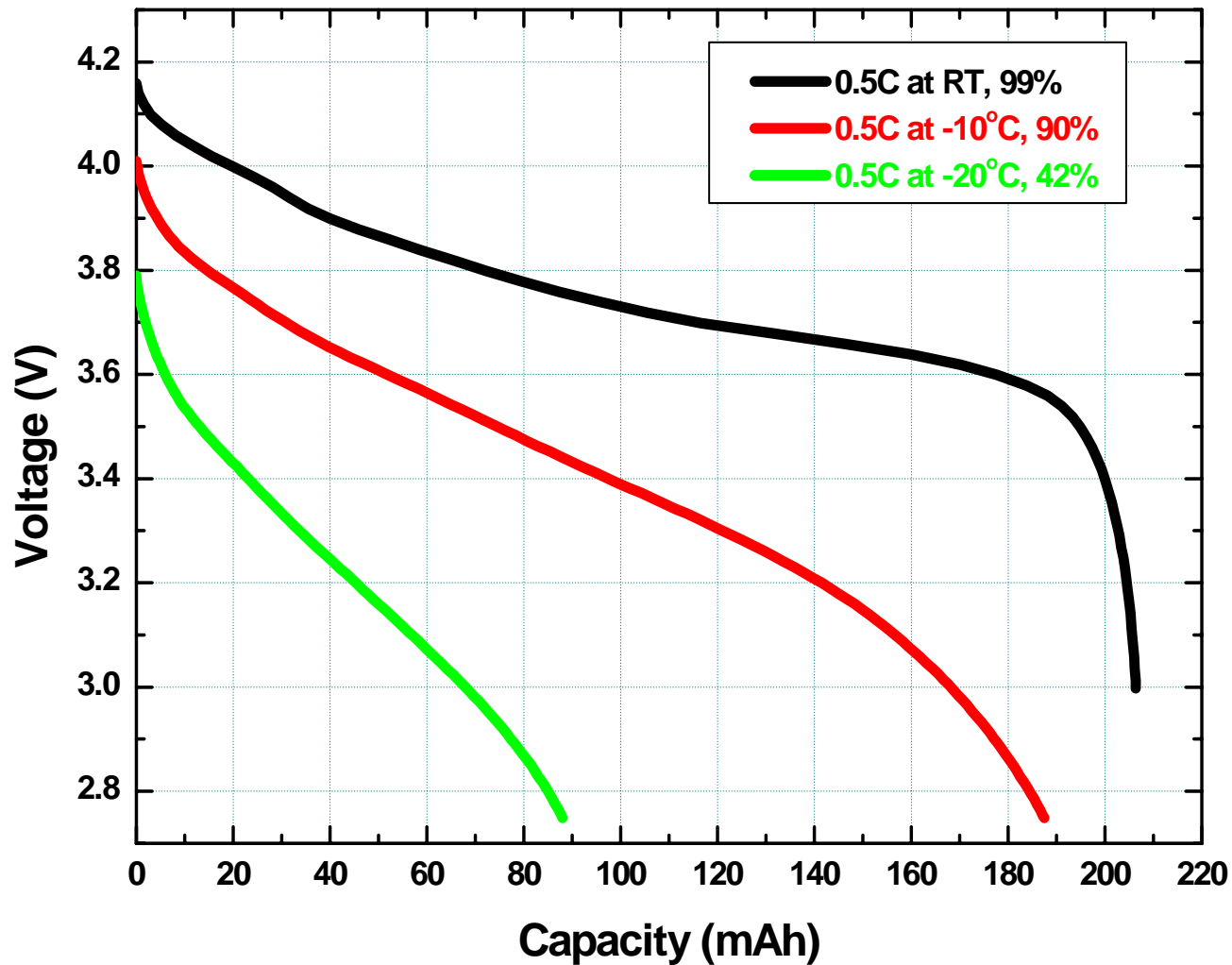
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2.3. 0.2C Discharge at low temperature



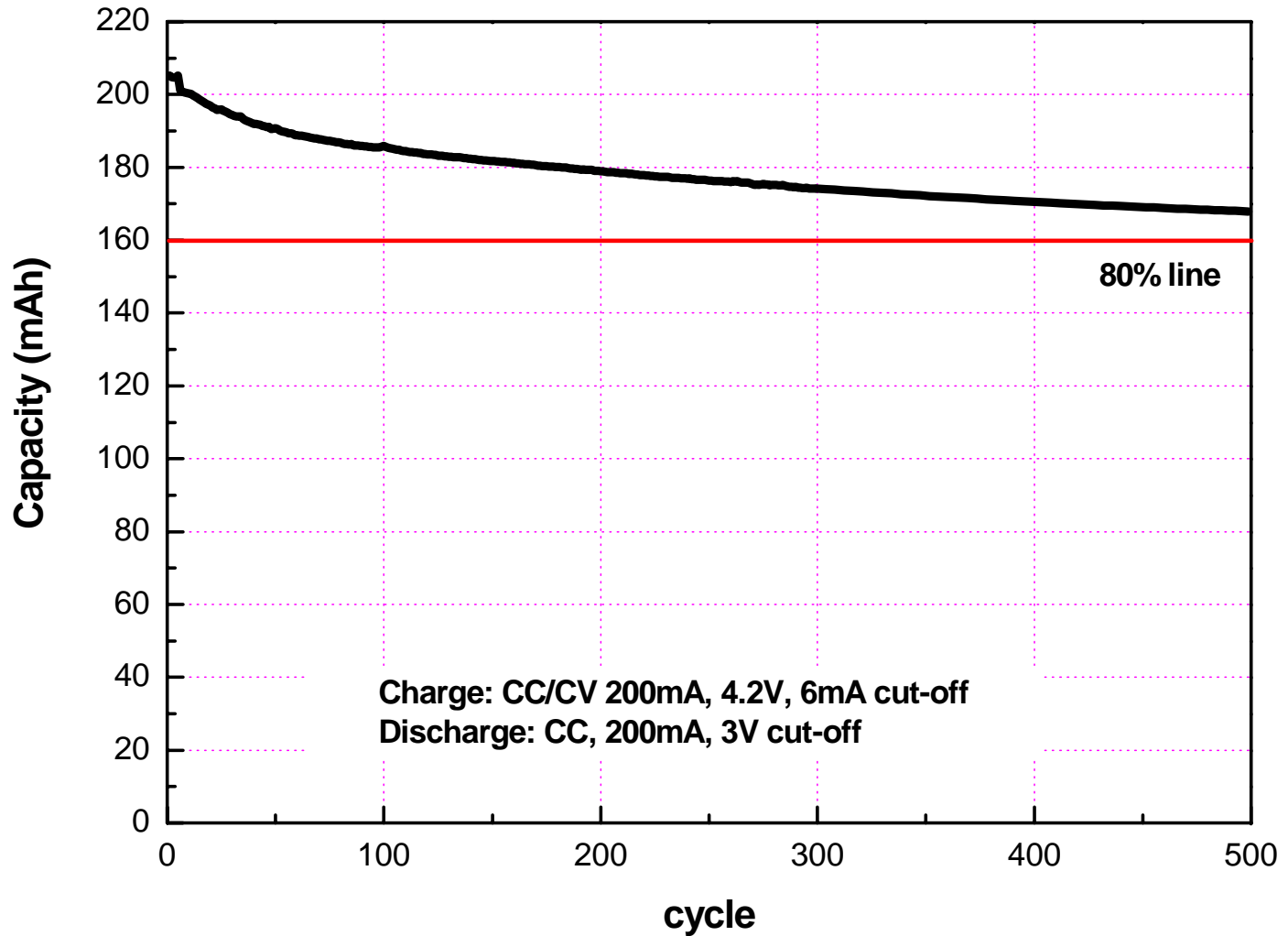
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2.4. 0.5C Discharge at low temperature



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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	6.5351	6.5343	0.01%	0.00
Thickness, mm (at 90°C)	5.374	5.497	2.29%	0.10
Thickness, mm (at RT)	5.374	5.370	1.79%	0.09
Residual capacity, mAh	203	185	91%	0.55
Recovery capacity, mAh	203	195	96%	0.83

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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	6.5493	6.5482	0.02%	0.01
Thickness, mm (at RT)	5.413	5.474	1.12%	0.56
Residual capacity, mAh	209	182	87%	2.31
Recovery capacity, mAh	209	196	94%	2.33

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3.3. Thermal shock test(-40 °C/80 °C, 10 cycles)

** Average of 5 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	6.5418	6.5400	0.03%	0.01
Thickness, mm (at RT)	5.404	5.494	1.67%	0.08
Residual capacity, mAh	208	181	87%	0.72
Recovery capacity, mAh	208	194	93%	0.69

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4. Safety test

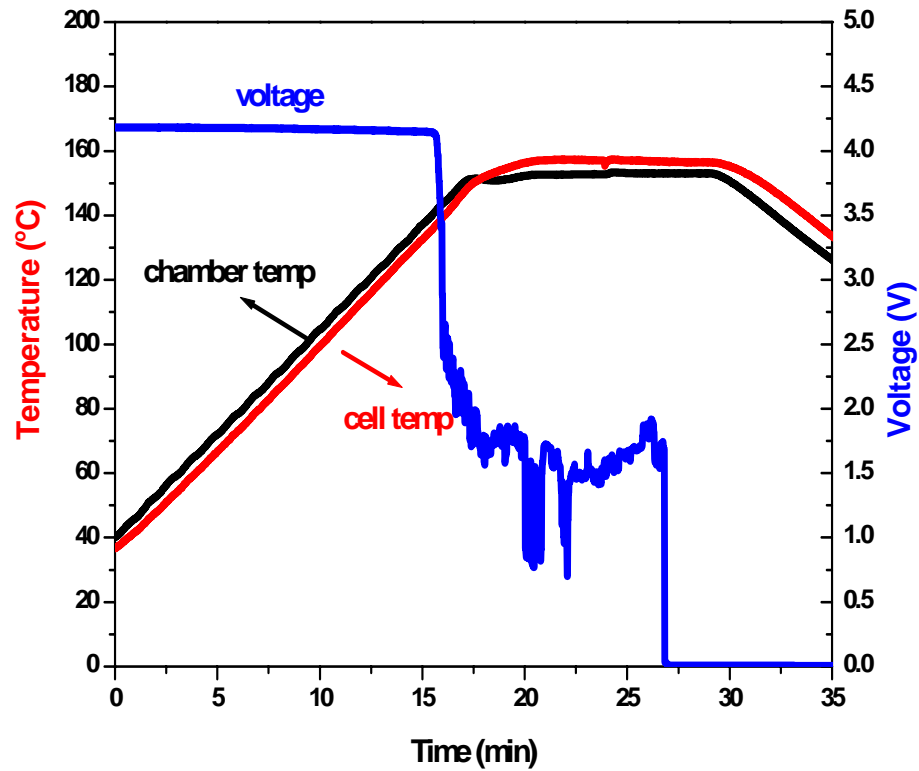
Test	Result
Hot box test (150°C, 10min)	NF, NE, NV
Short circuit test at RT	NF, NE, NV
Short circuit test at 60°C	NF, NE, NV
Overcharge test (3C, 250% charge)	NF, NE, vent
Impact test	NF, NE, NV

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

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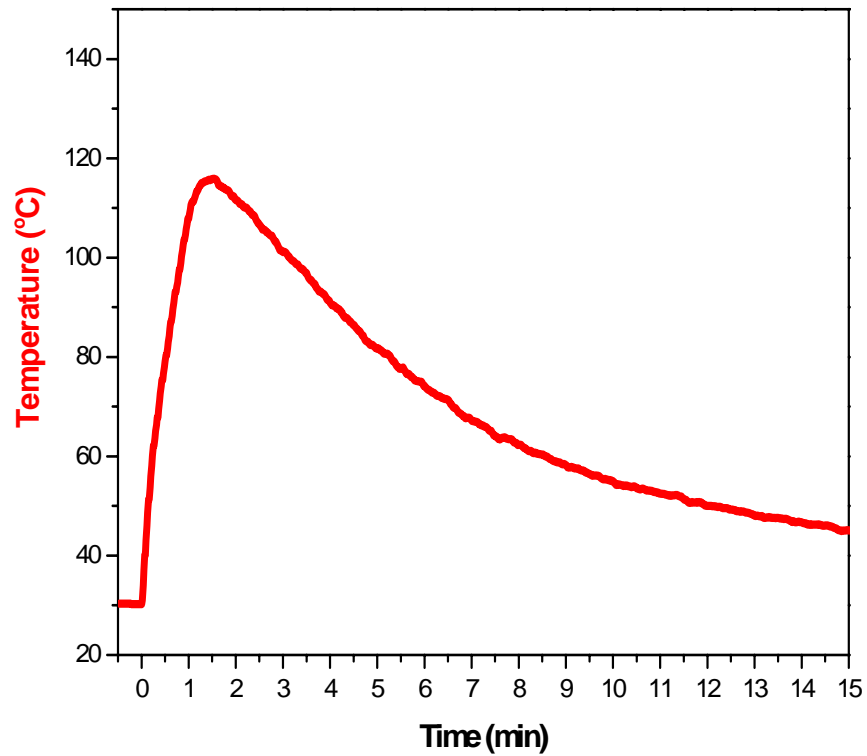
4.1. Hot-Box Test (150 °C, 10min)



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4.2. Short circuit Test at RT

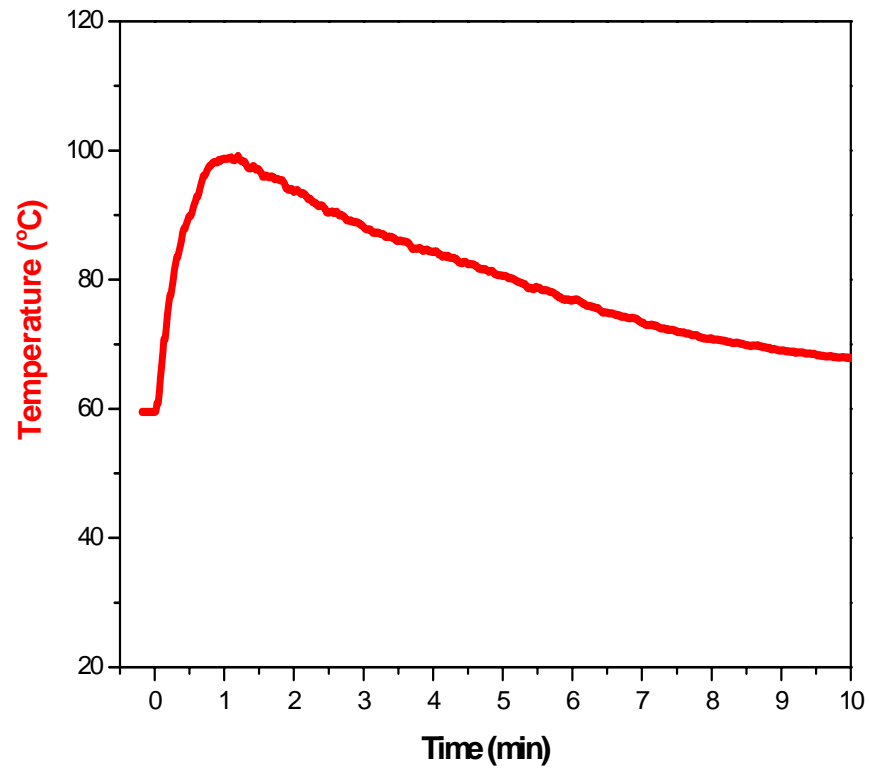


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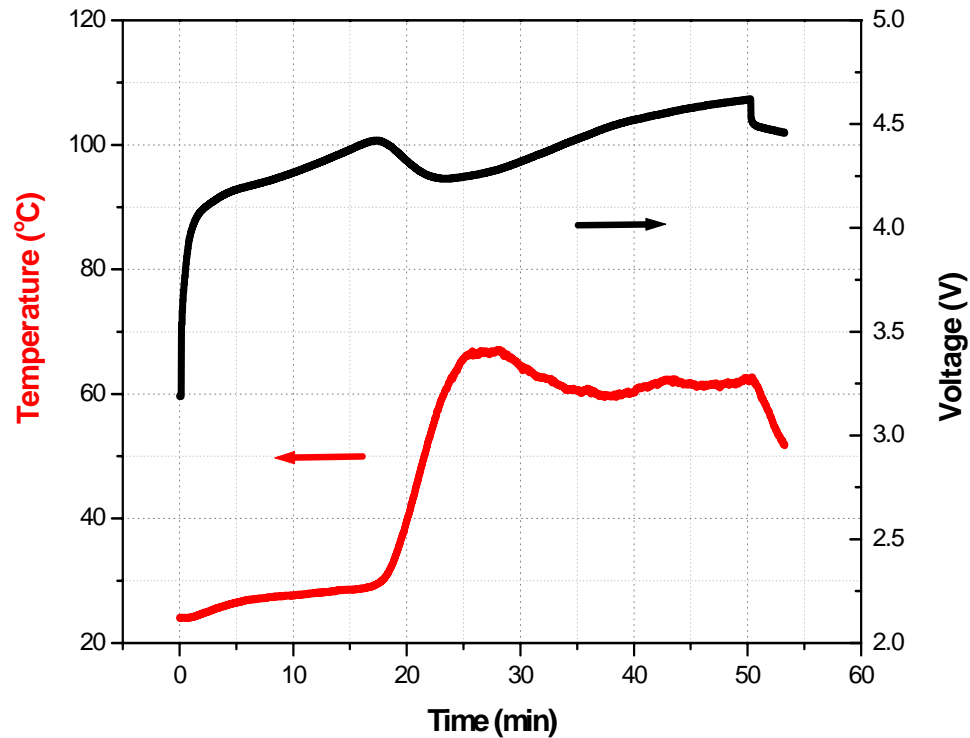
4.3. Short circuit Test at 60°C



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4.4. Overcharge test (3C continuous overcharge)

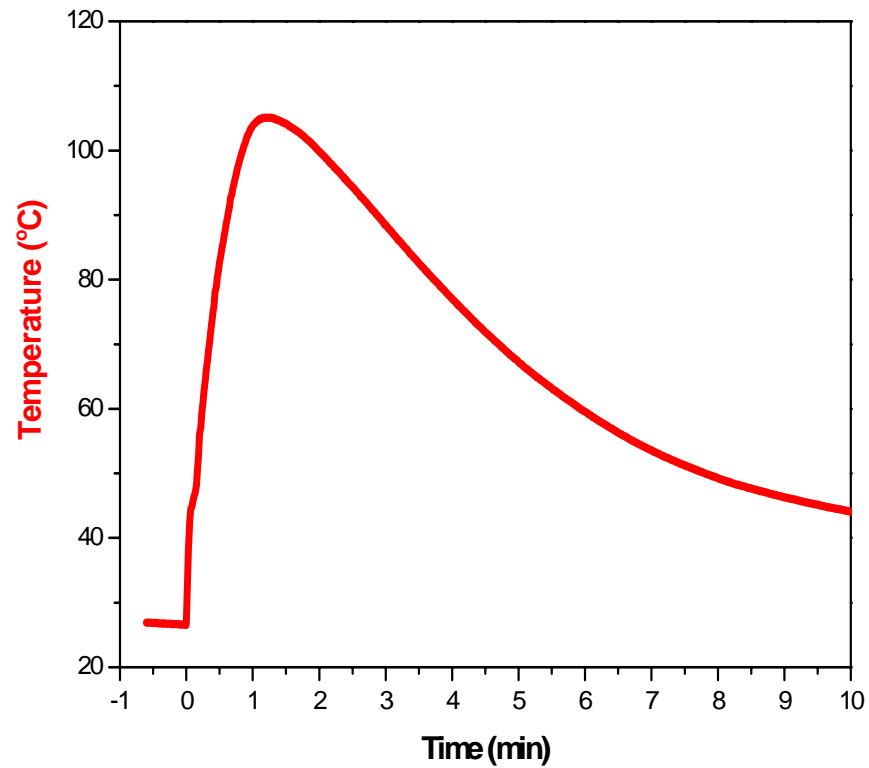


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4.5. Impact test



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