



Lithium-ion
Rechargeable
Batteries

Technical Data Sheet ***PD2032***

www.powercellkorea.com

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Korea PowerCell Inc.

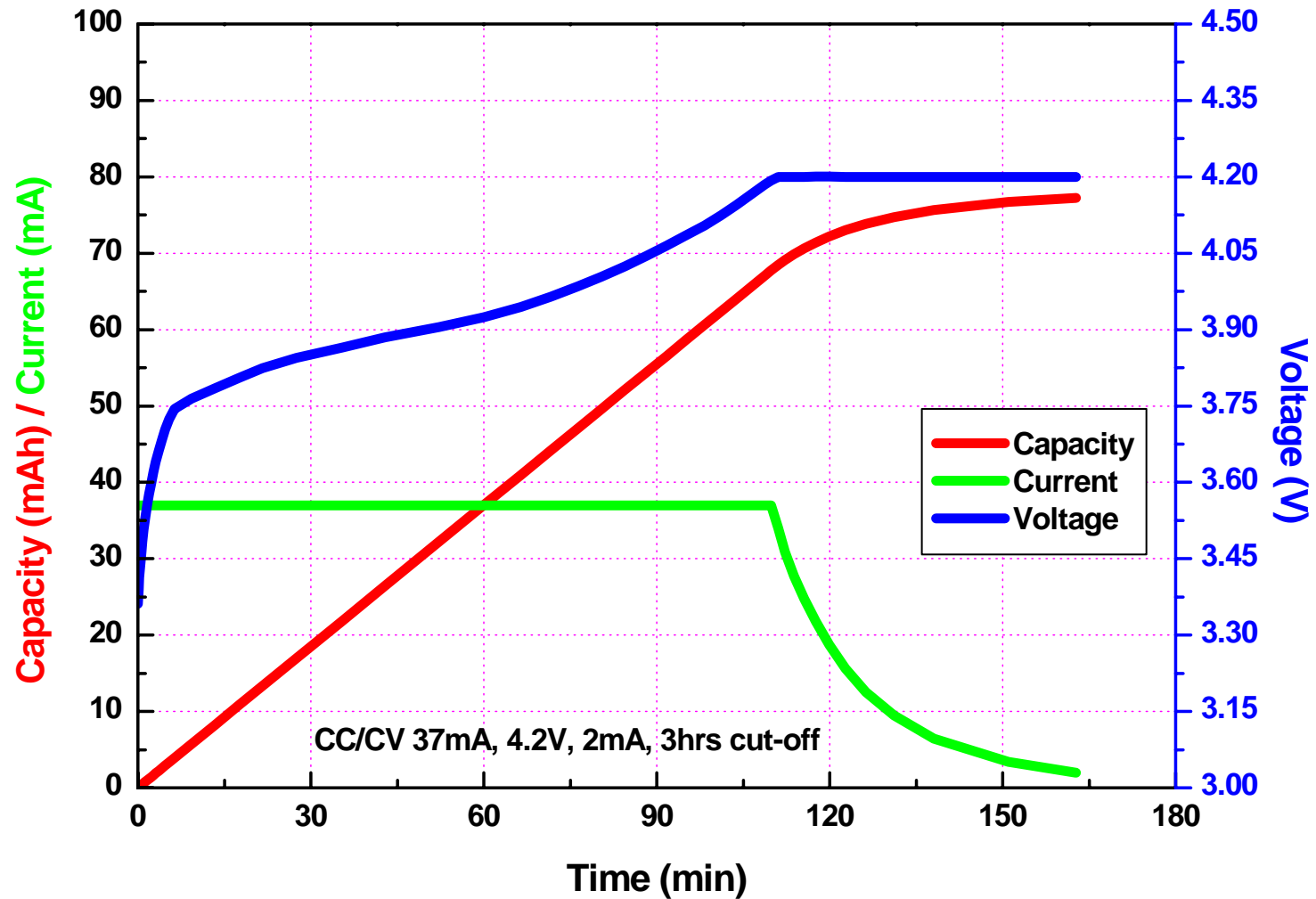
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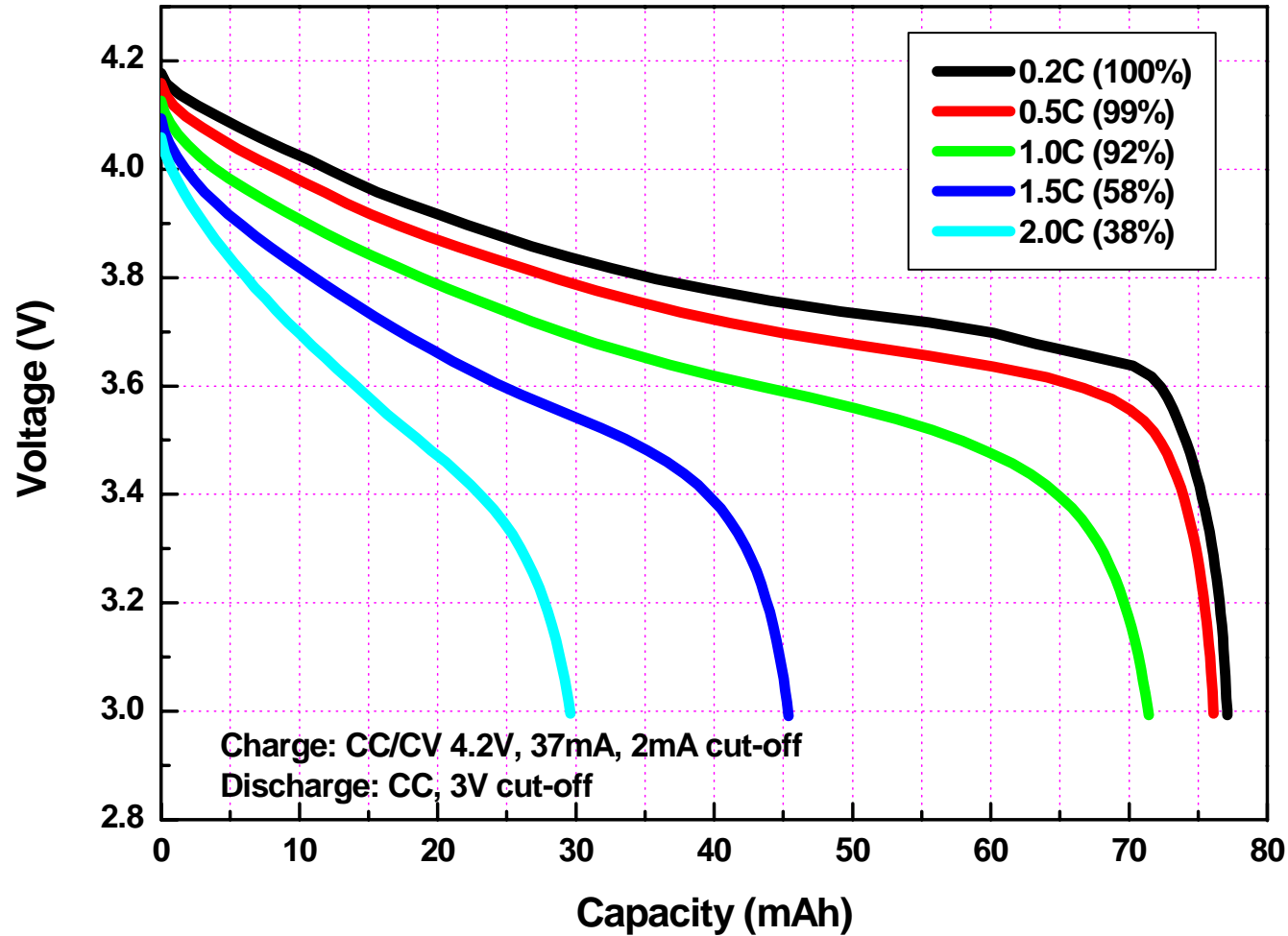
1.Specification

Model		PD2032
Nominal Capacity		75 mAh (0.2C, 3.0V Cut-off)
Nominal Voltage		3.7 V
Dimension	Thickness	3.3 ± 0.2 mm (center)
	Diameter	20.0 ± 0.1 mm
Charge Method		CC-CV
Charge Voltage		4.2 V
Charge Current		* Standard 37 mA (End - Current : 2mA)
Discharge Current		* Standard 37 mA, Max. 150mA
Discharge end voltage		3.0 V
Discharge Temperature		- 20°C ~ + 60°C
Internal Impedance		Max. 1000 mohm
Weight		approx 3.1g

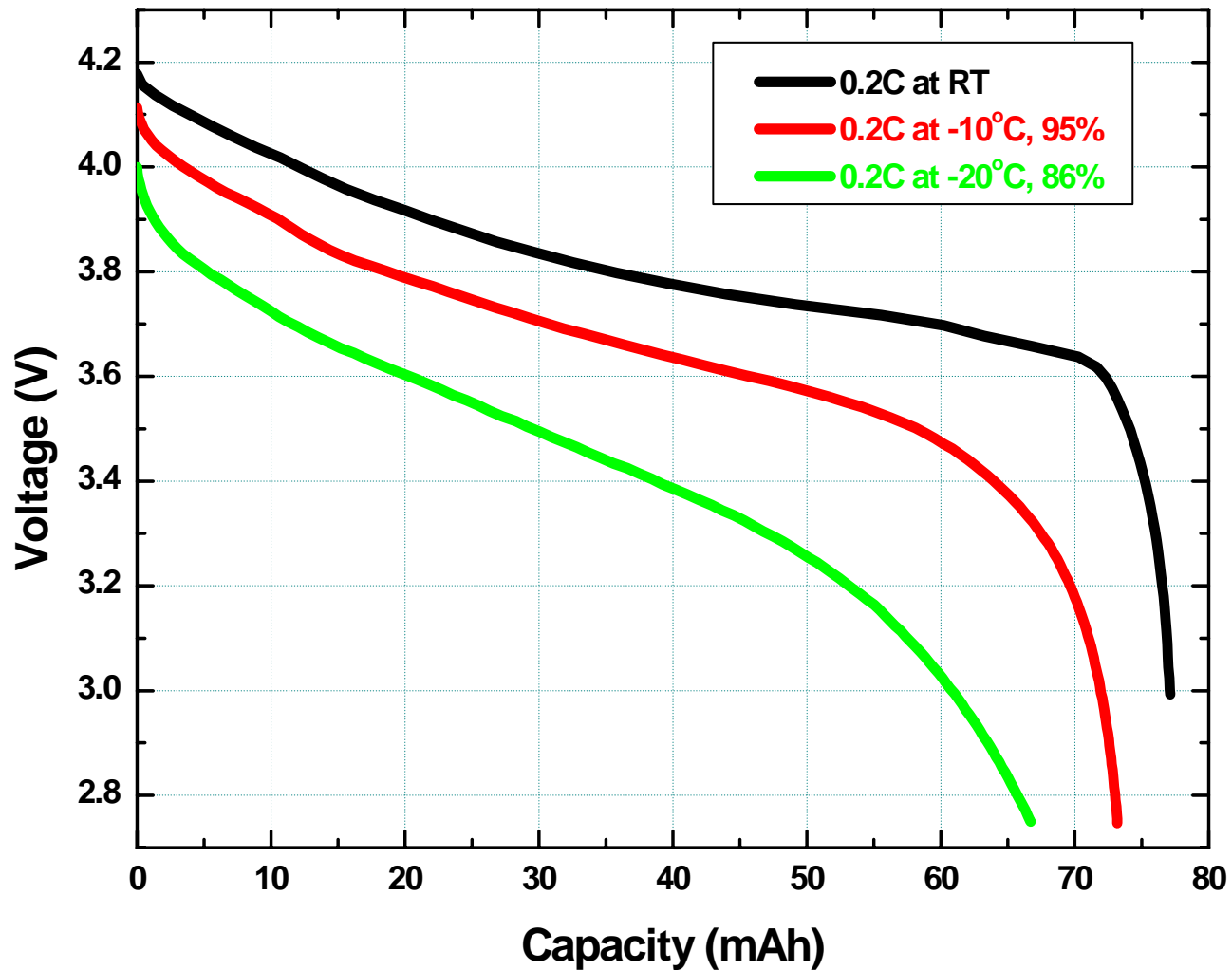
2.1. Charge Characteristics – 0.5C at 25



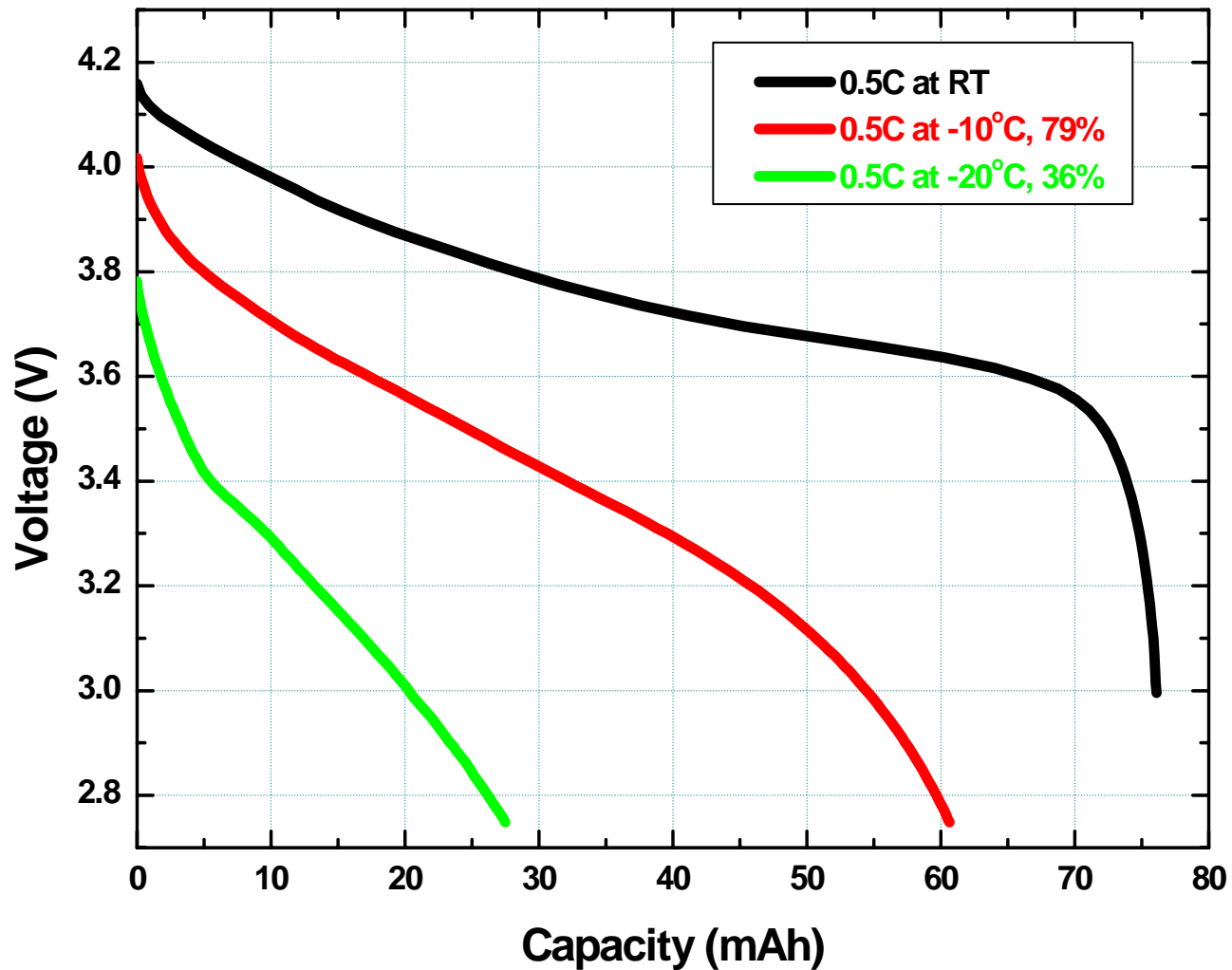
2.2. Discharge Characteristics at 25



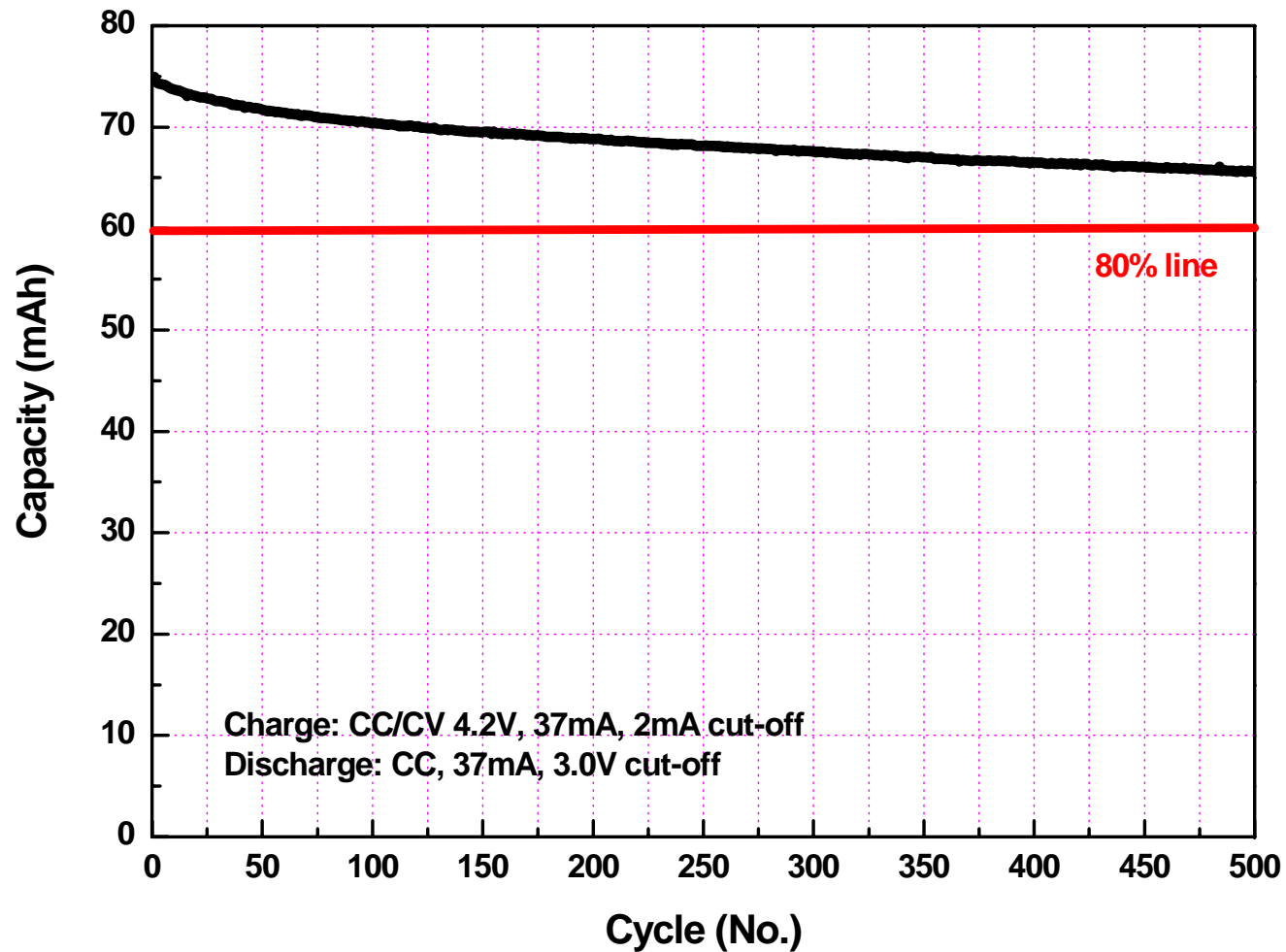
2.3. 0.2C Discharge at low temperature



2.4. 0.5C Discharge at low temperature



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



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

** Average of 5 samples.*

	Before storage	After storage	Δ	Stdev.
Weight, g	3.2084	3.2083	0.00%	0.000
Impedance, ohm (at 1kHz)	349	477	36%	0.086
Thickness, mm (at 90°C)	3.548	3.597	1.37%	0.002
Thickness, mm (at RT)	3.548	3.584	1.01%	0.001
Residual capacity, mAh	74	67	91%	0.82
Recovery capacity, mAh	74	71	95%	0.57

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

** Average of 5 samples.*

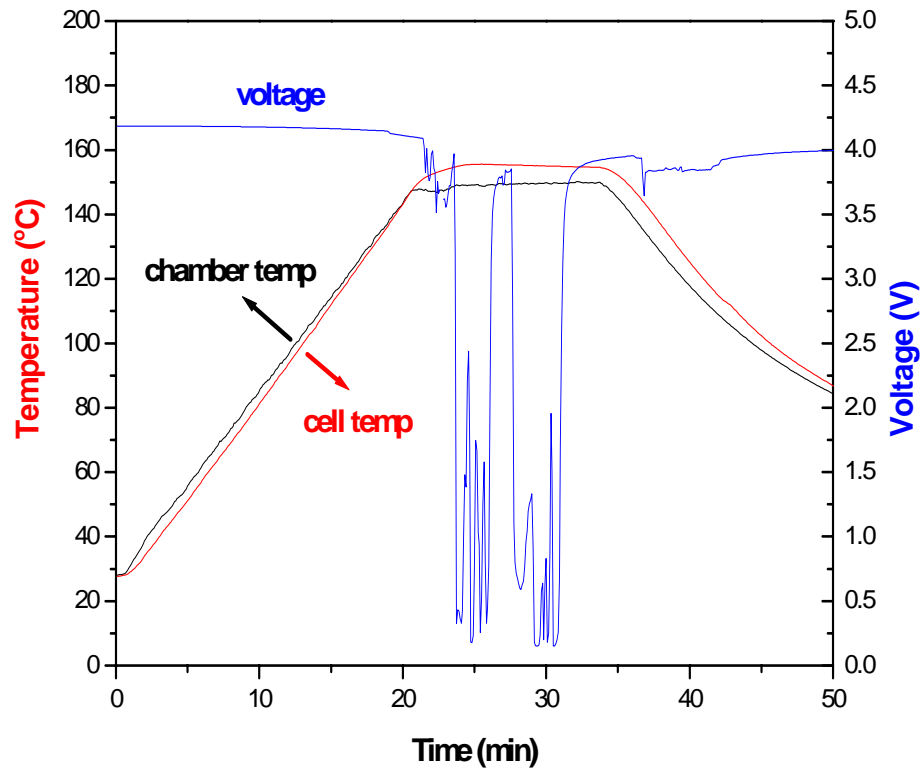
	Before storage	After storage	Δ	Stdev.
Weight, g	3.2125	3.2109	0.05%	0.000
Impedance, ohm (at 1kHz)	318	529	67%	0.115
Thickness, mm (at RT)	3.531	3.551	0.58%	0.002
Residual capacity, mAh	75	61	82%	0.768
Recovery capacity, mAh	75	67	90%	0.825

4. Safety test

Test	comment
Hot box test (150°C, 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
Overdischarge test (0.2C, 12.5hr discharge)	NF, NE, NV

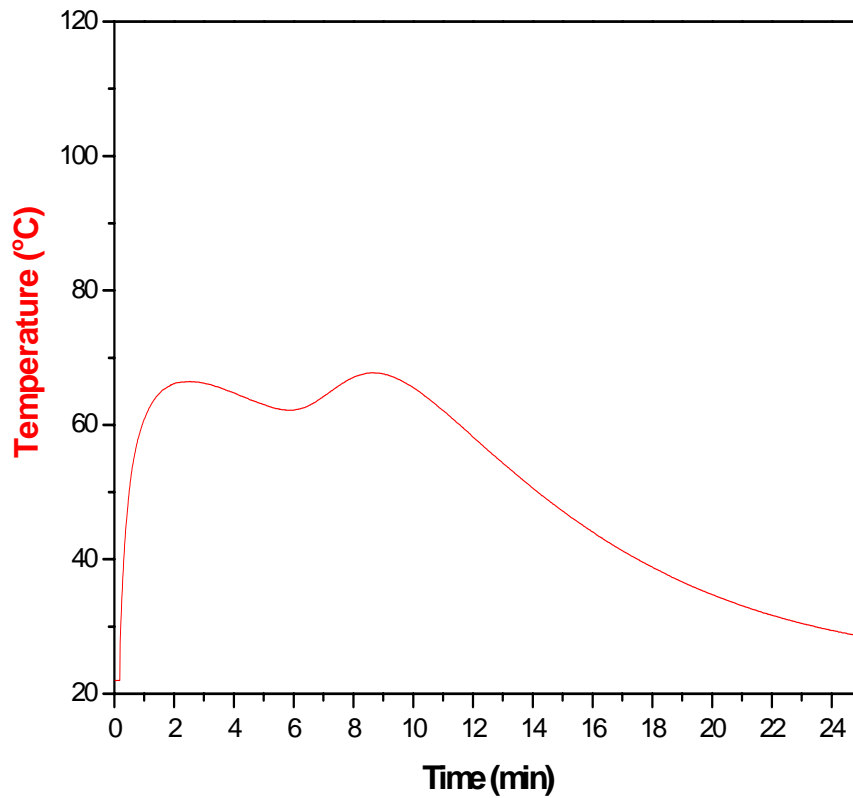
** NF= no fire, NE= no explosion, NV=no vent*

4.1. Hot-Box Test (150 °C, 10min)



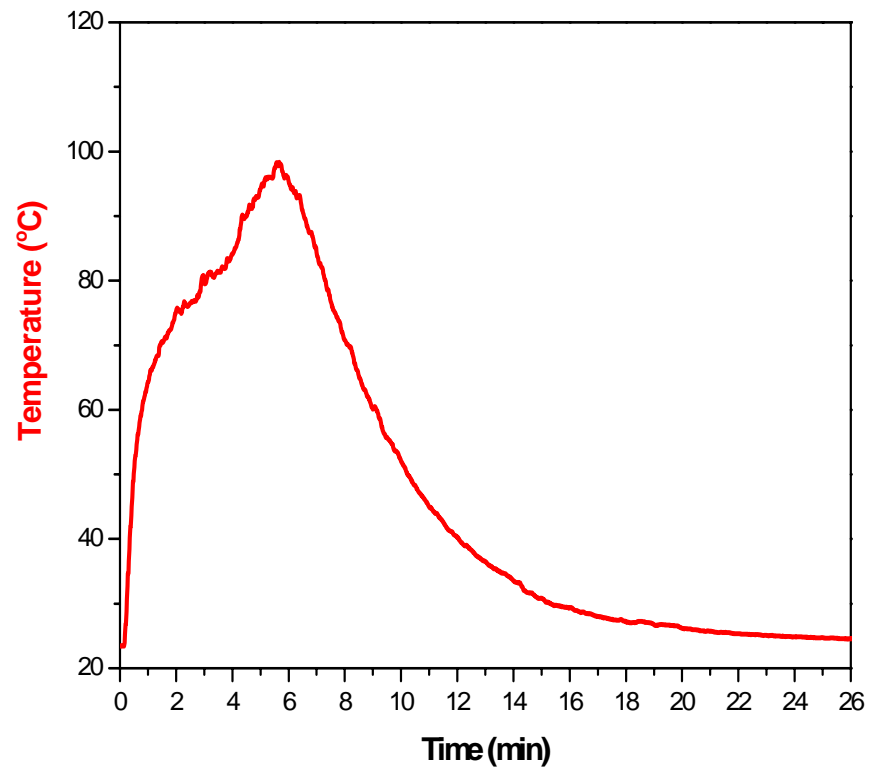
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4.2. Nail Penetration Test



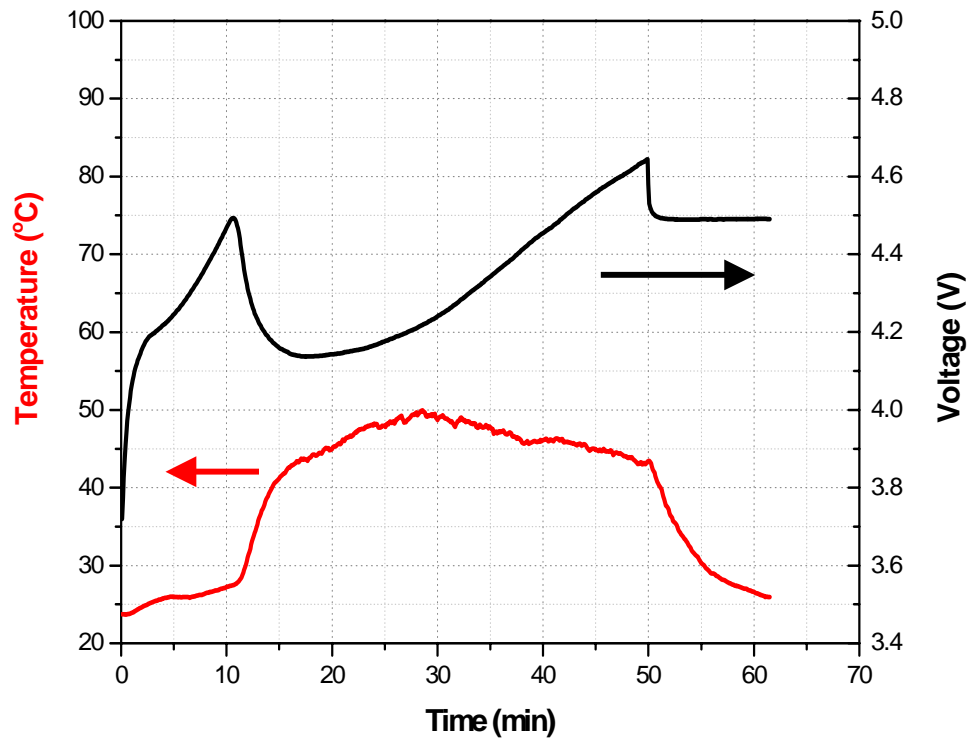
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4.3. Short circuit Test



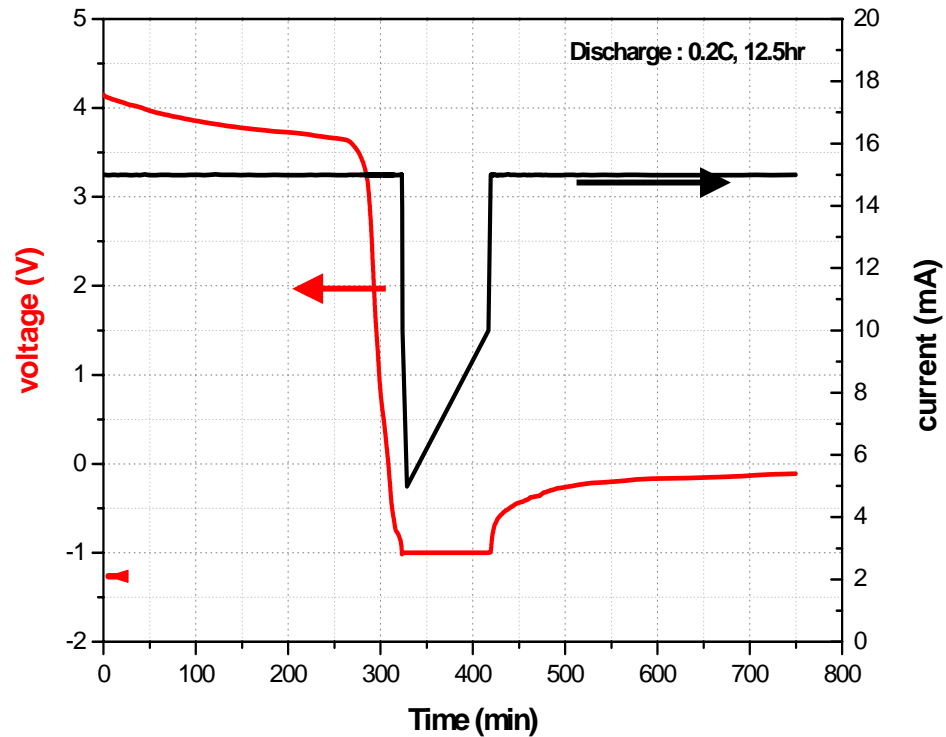
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4.4. Overcharge test (3C continuous overcharge)



<after test>

4.5. Overdischarge test (0.2C, 12.5hr discharge)



<after test>