

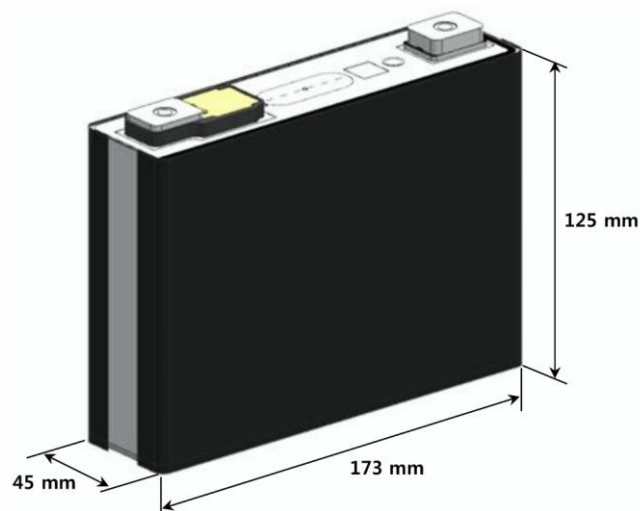
Technical specification

Li-Ion Cell SDI94AH



Specification

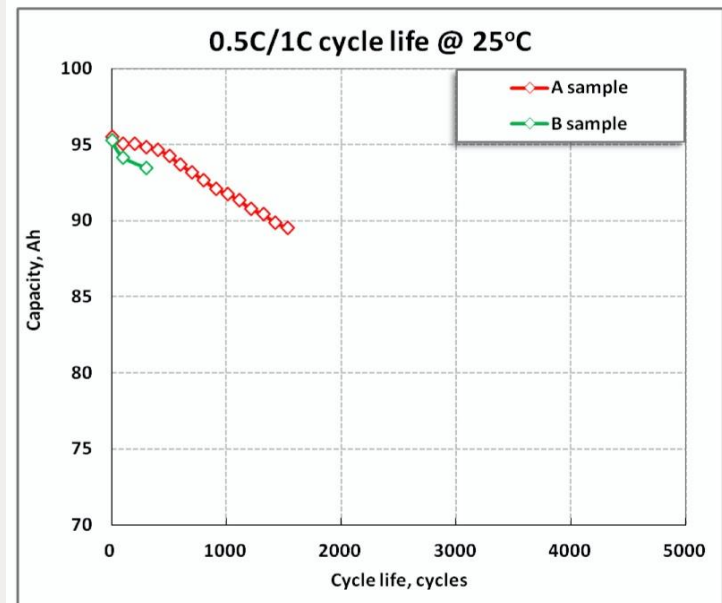
Nominal Capacity	min. 94 Ah ave. 95.6 Ah	
Nominal Voltage	3.68 V	
Energy (ave.)	350 kWh	
Voltage (max. charge)	4.15 V	
Discharge power (ave.)	5s at 25 °C, SOC 90%	1546 W
	30s at 25 °C, SOC 90%	1102 W
	30s at 25 °C, SOC 20%	966 W
	30s at -25 °C, SOC20%.	155 W
Dimension (L x W x H, mm)	173 x 125 x 45	
Weight	max. 2.06 kg ave. 2.01 kg	



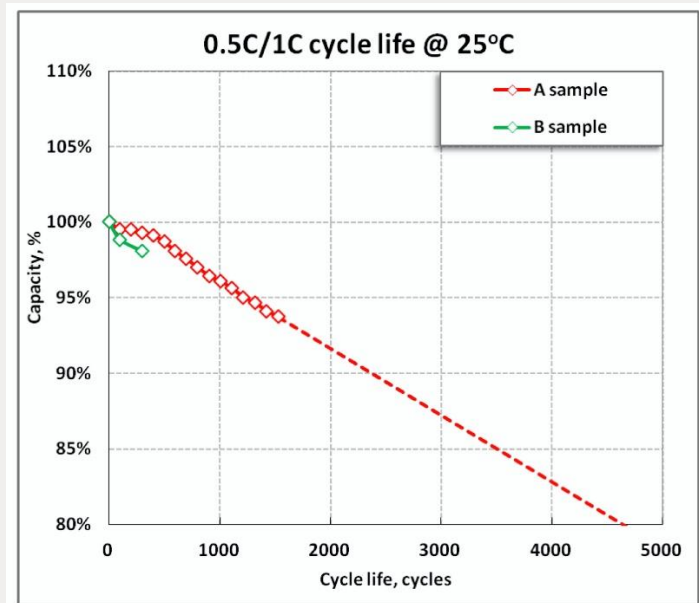
Item	Condition	Unit	Spec.	Sample
Capacity	1/3C at 25°C (31.3 A)	Ah	min. 94	min. 94
Rated capacity	1/3C at 25°C (31.3 A)	Ah	-	95.8
Energy	1/3C at 25°C (31.3 A)	Wh	≥ 300 Wh/L	352
Cell weight	Max.	kg	2.17	Ave. 2.01
Voltage	Charge maximum	V	4.15	4.15
Discharge power	5s at 25°C, SOC90% (Vmin.: 3.72 V & I _{max} : 413A)	W	-	1549
	30s at 25°C, SOC 90% (Vmin.: 3.72 V & I _{max} : 294A)	W	-	1104
	30s at 25°C, SOC20% (Vmin.: 3.13 V & I _{max} : 290A)	W	-	969
	30s at -25°C, SOC20% (Vmin.: 2.0 V & I _{max} : 77A)	W	-	161
DC-IR	@ RT, 5s, SOC 90%	mΩ	-	0.69
	@ RT, 30s, SOC 90%	mΩ	-	0.95
	@ RT, 30s, SOC 20%	mΩ	-	1.02
	@ -25°C, 30s, SOC 20%	mΩ	-	20.01
Cycle life	25°C, 0.5C/1C, Capacity Recovery: 80% EOL	cycles	> 3200	4600 (estimation)
Calendar life	60°C, SOC100%, Capacity Recovery: 80% EOL	years	-	> 2.5
Self discharge	SOC 100%, 30 days		Capacity retention ≤ 5%	< 2%
Max. dynamic compression force	Delivery SOC (40%), 0.02mm/sec, BOL	N	-	174
Min. residual force	Delivery SOC (40%), 5 min, BOL	N	-	156
Swelling force	With rigid jig, SOC 100%, EOL (80%)	N	-	22 kN

Cycle Life

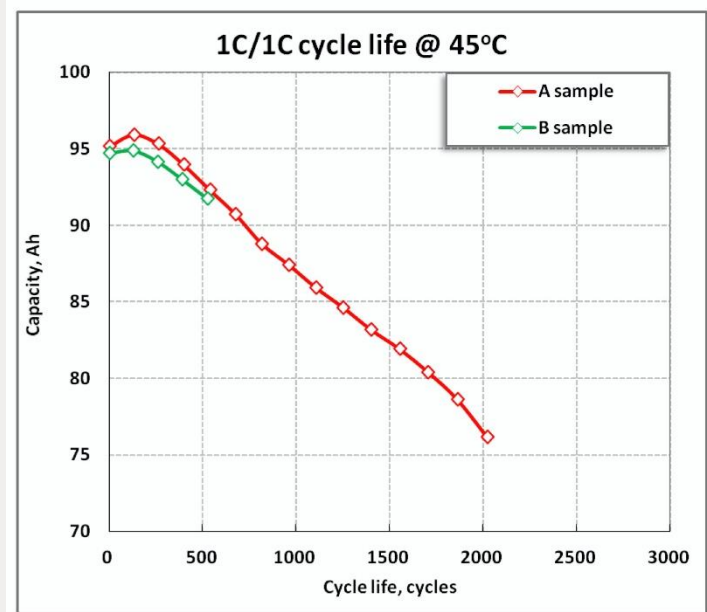
Charge: 1/3C Vmax CCCV charge, 1/50C cut off rest 30 min
 Discharge: 1/3C CC discharge Vmin cut off rest 60 min



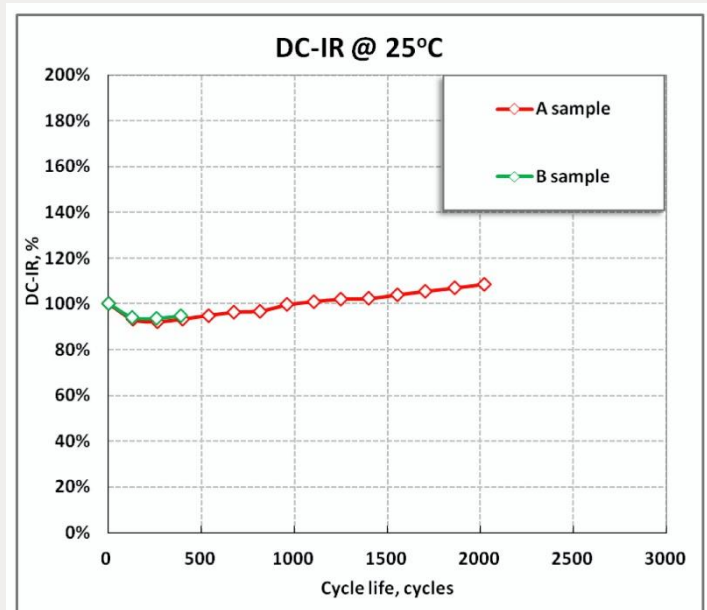
Voltage Range 2.7V -4.15V
 Estimated EOL (80%) 4 600 cycles



Charge: 1/3C Vmax CCCV charge, 1/50C cut off rest 30 min
 Discharge: 1/3C CC discharge Vmin cut off rest 60 min



Voltage Range 2.7V -4.15V
 Estimated EOL (80%) 2000 cycles

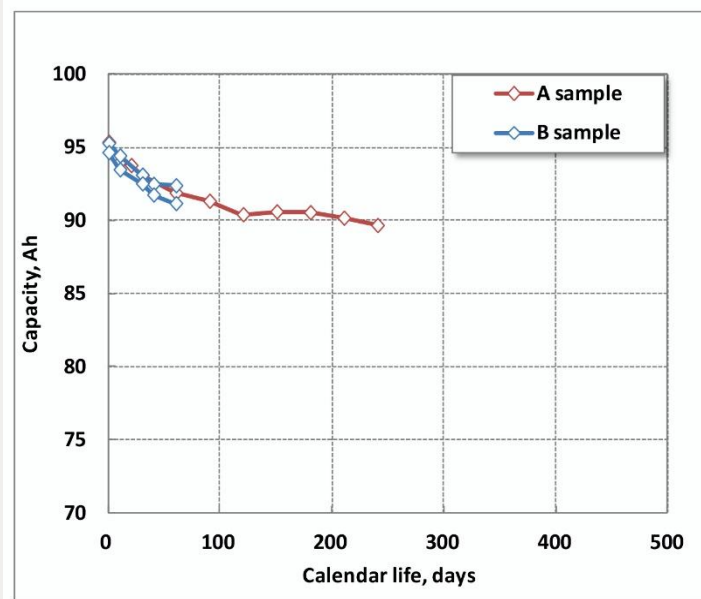


Calendar Life

60°C, SOC 100%

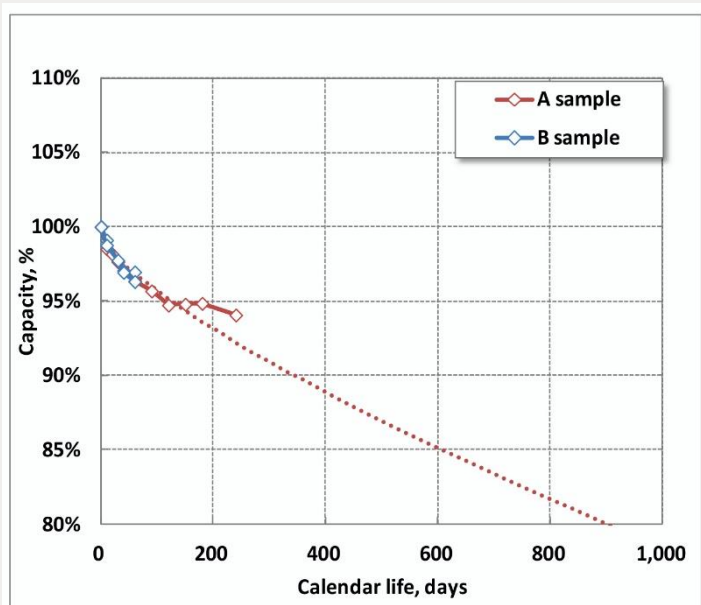
Charge 1/3C Vmax CCCV charge, 1/50C cut off rest 30 min

Discharge: 1/3C CC discharge Vmin cut off rest 60 min at 25°C



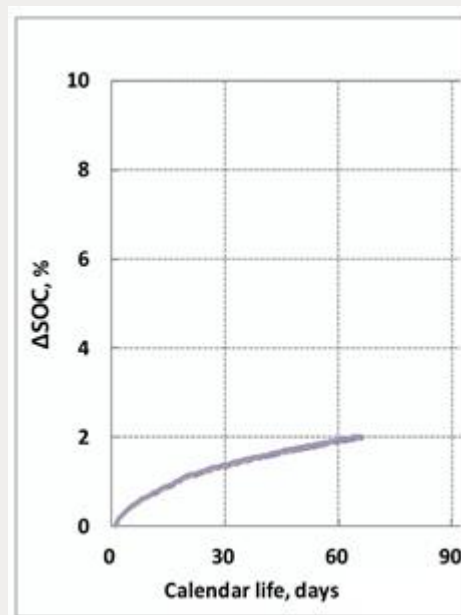
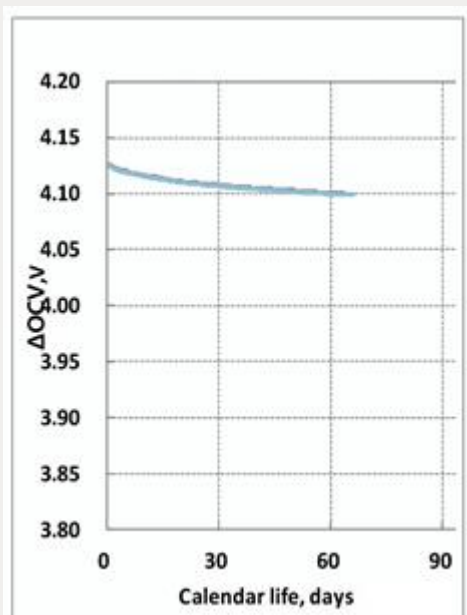
Voltage Range 2.7V -4.15V

Estimated life at EOL (80%) >2.5 years



Self discharge

25°C, SOC 100%



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