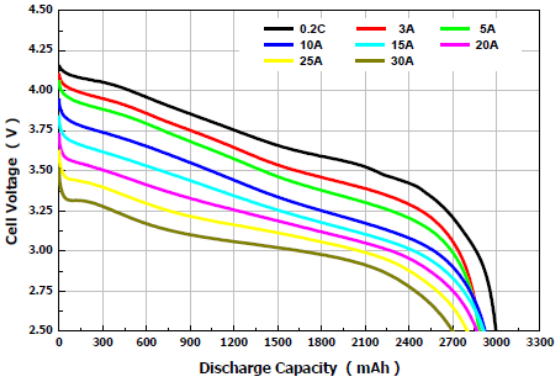
BTO Sp. z o.o.
Fabryczna 25
90-341 Łódź

LG INR18650HG2

Technical Information of LG 18650HG2 (3.0Ah)

Type		Specification	Actual
Chemistry		$Li[NiMnCo]O_2$ (H-NMC) / Graphite + SiO	
Dimensions (mm)	Diameter	18.3 +0.2 / -0.3 mm	
	Height	65.00 ± 0.2 mm	
Weight (g)		Max. 48	44~45
Initial IR (mΩ AC 1kHz)		Max. 17	14~16
Initial IR (mΩ DC)		Max. 30	24~26
Nominal Voltage (V)		3.6	
Charge Method		Nominal : 1.5A 4.2V, 50mA End-current (CC-CV)	
		Fast : 4A 4.2V, 100mA End-current (CC-CV)	
Charge Time	Nominal (min)	165min	
	Fast (min)	85min	
Charge Current	Nominal Current (A)	1.25A	
	Max. Current (A)	4A	
Discharge	End Voltage (A)	2V	
	Max. Current (A)	20A (Continued discharge current)	
0.2C Capacity	Nominal (Ah)	3.0 Ah	
Energy Density	Nominal (Wh/kg)	240	

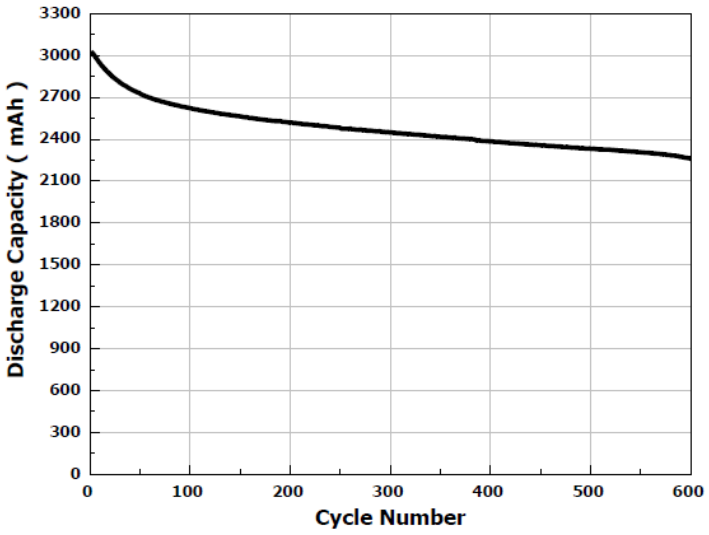
- **Test Condition**
  - Charge (CC/CV): 4A charge to 4.2V, 100mA cut-off
  - Discharge (CC) : 0.2C-3A-5A-10A-15A-20A-25A-30A discharge, 2.5V cut-off (no temperature. cut off)



	0.2C	3A	5A	10A	5A	20A	25A	30A
Capacity (mAh)	2998	2886	2884	2925	2913	2873	2802	2702
% C_N	100	96	96	98	97	96	93	90
Energy (Wh)	11.0	10.3	10.1	9.8	9.5	9.2	8.7	8.2
% W_N	102	95	94	91	88	85	81	76

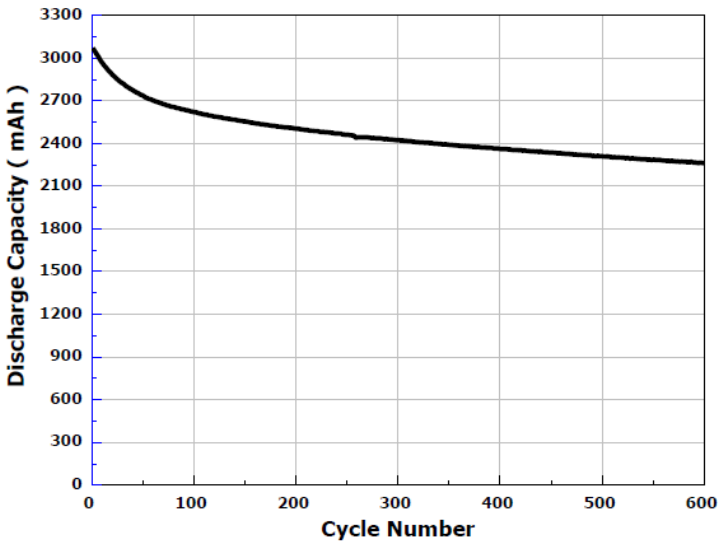
• Test Condition
- Charge (CC/CV): 4A charge to 4.2V, 0.1A cut-off
- Discharge (CC) : 10A discharge, 2.0V cut-off

[10A Cycle]



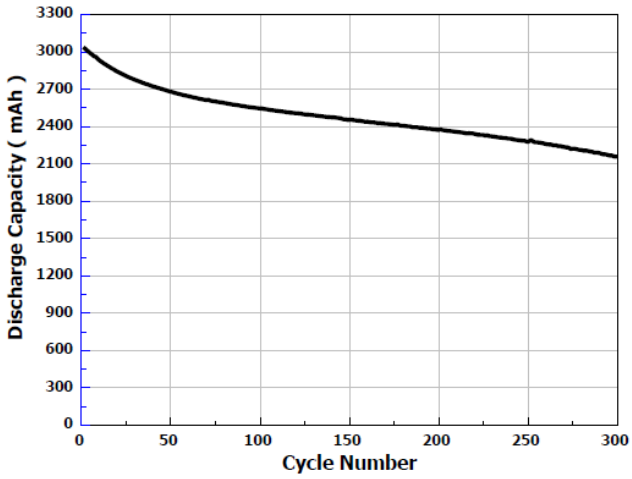
• Test Condition
- Charge (CC/CV): 4A charge to 4.2V, 0.1A cut-off
- Discharge (CC) : 15A discharge, 2.0V cut-off

[15A Cycle]



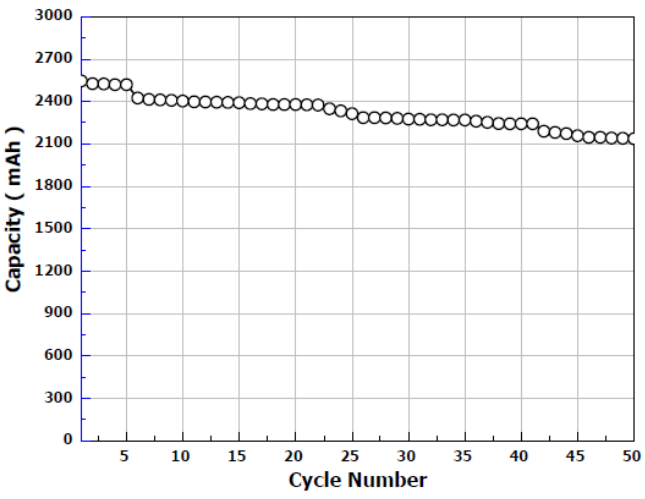
• Test Condition
- Charge (CC/CV): 4A charge to 4.2V, 0.1A cut-off
- Discharge (CC) : 20A discharge, 2.0V cut-off

[20A Cycle]



•Test Conditions
- Charge : 4A to 4.2V, 100mA Cut-off at 23℃
- Discharge : 95A (0.5sec) → 80A (0.5sec) → 45A (0.5sec) → 30A (6sec) → rest (12sec), 1.5V cut-off at 23℃

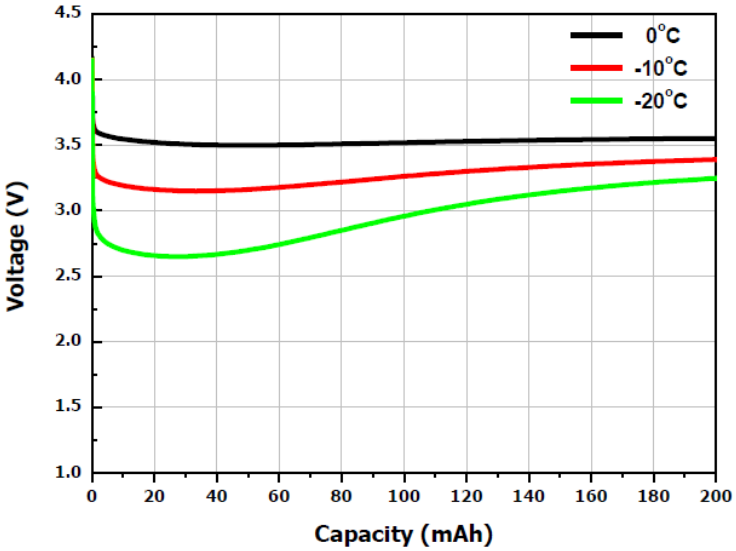
[High Current Pulse Cycle]



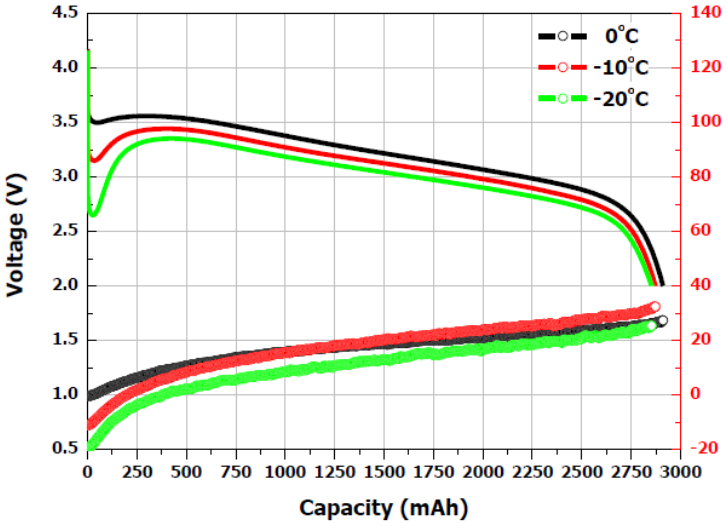
Test Condition

- **Charge (CC/CV): 4A charge to 4.2V, 100mA cut-off at RT**
- **Discharge (CC) : 10A, at 0, -10, -20℃, 1.5V cut-off**

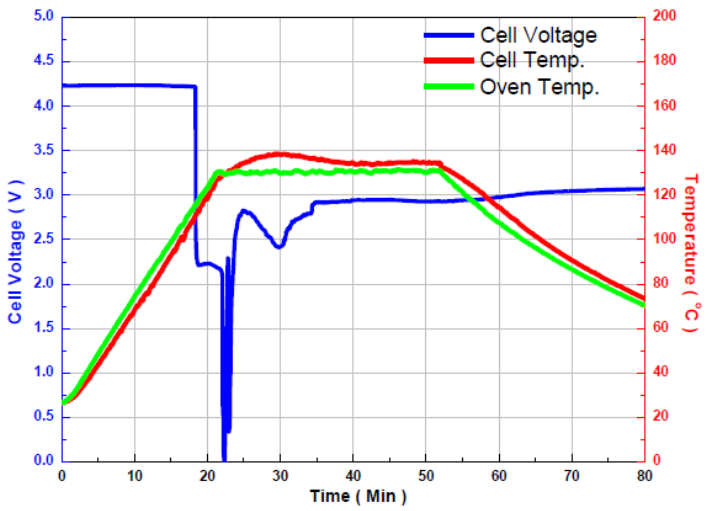
Discharge vs. Temp.



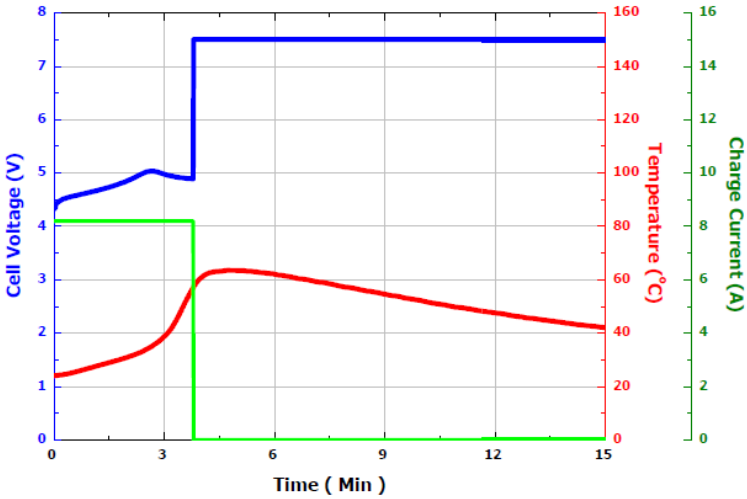
Discharge vs. Temp.



[Hot box, 130℃, 1h]



[Overcharging, 8.2A]



Can material: Steel (Nickel-plated)
Tube material: Colored PET (t=0.08 ± 0.02 mm)