

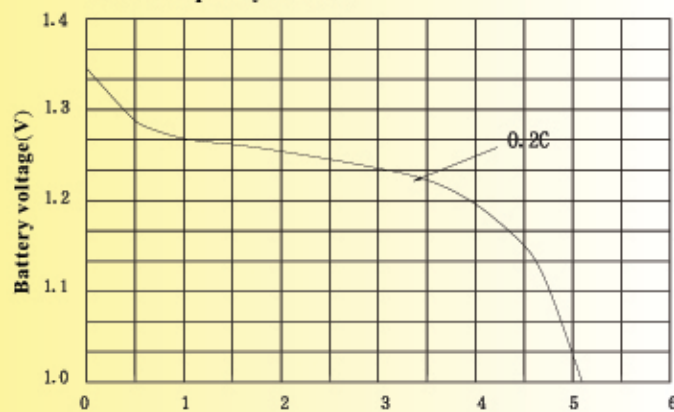
Ni-cd rechargeable button cell

Specification

Dimensions	diameter (mm)		16max
	Height (mm)		6.0±0.1
	Weight(g)		Approx 3.3g
Nominal Voltage(V)			1.2 V
Nominal capacity (mAh)			60
Internal Impedance(mΩ)			≤400
Discharge Cut-off Voltage			1.0V
Ambient temperature	Charge	standard	0℃ to 40℃
		quick	10℃ to 40℃
	Discharge		-10℃ to 50℃
	Storage	<1 year	-10℃ to 30℃
		<3 months	-10℃ to 40℃

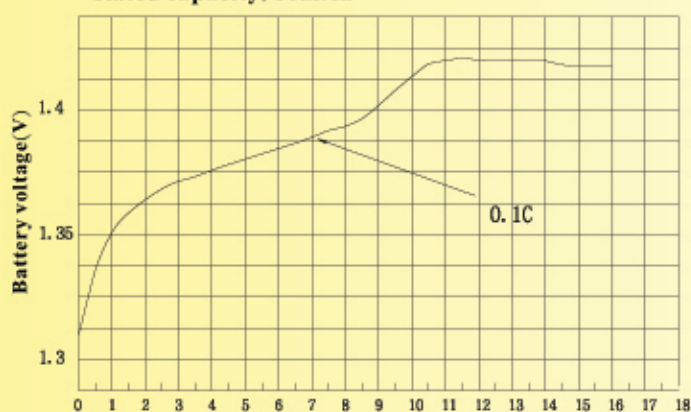
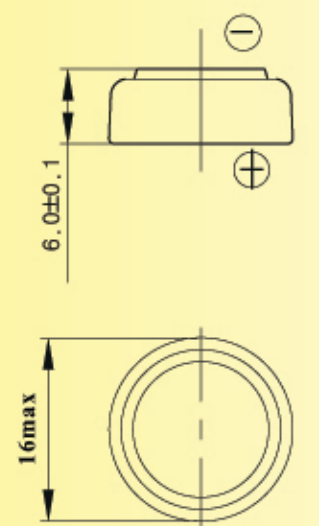
Discharge curve(discharge at 0.2C)

Rated capacity: 60mAh


 Discharge Time (hrs)
 Discharge curve of D-60K 60mAh battery at 0.2C

Charge curve(charge at 0.1C)

Rated capacity: 60mAh


 Discharge Time (hrs)
 Discharge curve of D-60K 60mAh battery at 0.1C


Dimension(Bare cell) mm

Ni-cd rechargeable button cell

Appearance

There shall be no such defects as discoloration, electrolyte leakage or no voltage.

Characteristics

Unless otherwise specified, the standard range of atmospheric conditions as follows:

- Ambient Temperature $20 \pm 5^{\circ}\text{C}$
- Relative Humidity $65 \pm 20\%$
- Atmospheric Pressure $960 \pm 100\text{mbar}$
- Voltmeters and ammeters to be used in test shall be of grade 0.5 over

Test Procedure and Its Standard

Test Item		Condition	Specification
1. Charge	Standard	Charge at $0.1C_5$ for 16 hours	
	Quick	Charge at $0.2C_5$ for 7 hours	
2. Standard Discharge		Discharge At $0.2C_5$ to 1.0V	
3. Discharge Cut-off Voltage			1.0V
4. Capacity	Nominal	Standard Charge/Discharge	60mAh
	Typical	Standard Charge/Discharge	65mAh
5. Internal resistance		After charge at $0.2C_5$ for 2.5 hours, rest 5 hours, measured at 1000Hz	$\leq 400\text{m}\Omega$
6. Cycle life		Standard by IEC	Capacity Retention $\geq 65\%$ After 500 cycles
7. Self-Discharge		The charged battery is stored for 28 days at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$. And the discharge time is measured at standard discharge	$\geq 180\text{minutes}$
8. High Temperature Test		Store at 50°C for 2 hours then at $0.2C$ discharge, charge at $0.1C$ for 16h at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$, first.	$\geq 270\text{minutes}$
9. Low Temperature Test		Store at 0°C for 2 hours then at $0.2C$ discharge, charge at $0.1C$ 16h at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ first.	No leakage
10. Short Circuit Test		Short circuit after fully charge	No explode
11. Drop Test		Free fall on the concrete from 1 meter for 3 axis after fully charged	No leakage No short-circuit No crack of sleeve