

Specification Sheet

1. Model No.: **250513**
2. Product Name: NiMH AA 2400 Rechargeable Battery
3. Electrical features:
 - 1) Nominal voltage: 1.2V
 - 2) Nominal capacity: 2400mAh
 - 3) Internal impedance: $\leq 30\text{m ohm}$
 - 4) Discharge cut-off voltage: 1.0V
 - 5) Ambient temp. for discharge: $-10\text{ }^{\circ}\text{C} \sim 50^{\circ}\text{C}$
4. Other features
 - 1) Appearance: Cylindrical shape
 - 2) Dimension: 14.2*50 mm
 - 3) Average weight: 31 g
5. Storage
 - 1) Temperature: $-10\text{ }^{\circ}\text{C} \sim 40^{\circ}\text{C}$
 - 2) Humidity: $\leq 65\% \pm 20\%$
6. Performance Testing

Examination procedure & standard

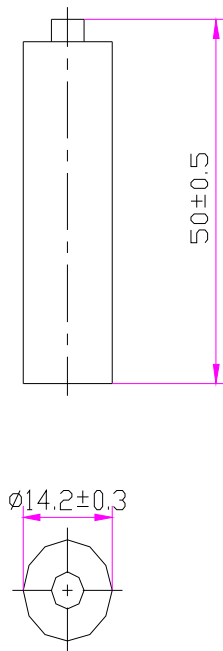
Test item		Condition		Specification	
1. Charge	Standard	Charge at 0.1C for 16 hours			
	Quick	Charge at 0.5C to $-\Delta V=5\sim 10\text{mV}$			
2. Discharge		At 0.2C to 1.0V			
3. Discharge cut-off voltage				1.0V	
4.Capacity (mAh)	Minimum	Standard charge/discharge		2300mAh	
	Typical	Standard charge/discharge		2400mAh	
5. Internal resistance		After fully charge,rest 1 hour, measured at 1000Hz		$\leq 30\text{m}\Omega$	
6. 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 measure 1d at standard discharge		$\geq 180\text{minutes}$	
7. High temperature test		Store at 40°C 、 50°C 、 60°C for 2 hours then charge/discharge		No leakage	
8. Low temperature test		Store at 0°C for 2 hours then charge/discharge		No leakage	
9. Short circuit test		Short circuit after fully charge		No explode	
10. Drop test		Free fall on the concrete floor from 1 meter after fully charged		No leakage No short-circuit	
11.Cycle life	Charge		Rest	Capacity retention $\geq 60\%$ after 500cycles	
	1	0.1C for 16h	0		0.25C for 2h20min
	2~48	0.25C for 3h10min	0		0.25C for 2h20min
	49	0.25C for 3h10min	0		0.2C to 1.0V
	50	0.1C for 16h	1~4h		0.2C to 1.0V

Ni-MH rechargeable cylindrical cell

Data Sheet

Nominal Voltage		1.2V	
Dimensions	Diameter	14.2±0.3mm	
	Height	50.0±0.5mm	
	Apx. Weight	31g	
0.2C Discharge Capacity	Typical	2400mAh	
	Minimum	2300mAh	
Typical Internal Impedance		Less than 30mΩ	
Charge		240mA for 16hrs	
Life expectancy		500 cycles	
Operating Temperature	Charge	0°C to 40°C	
	Discharge	-10°C to 50°C	
	Storage	<1 year	-10°C to 30°C
		<3 months	-10°C to 40°C

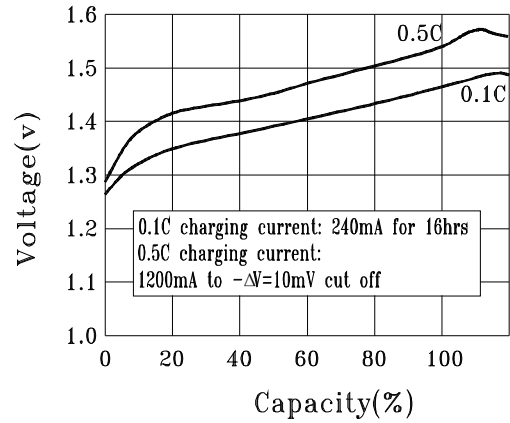
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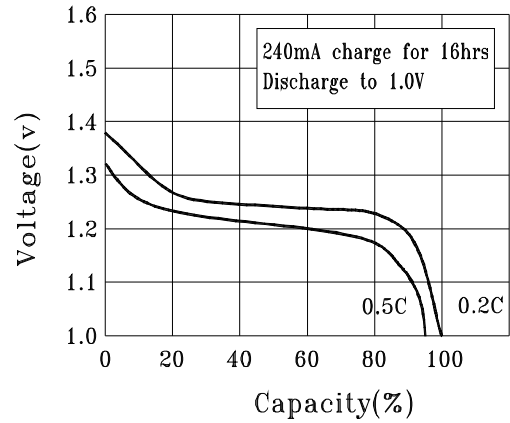
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CHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS AT DIFFERENT TEMPERATURE

