

AKUMULATOR EK NI-MH 2500mAh ROZMIAR AA**1. Scope**

This specification is suitable for the performance of following nickel metal hydride cylindrical cell and its stack-up battery packs ;

Model: AA2500

Size: AA

The data involving nominal voltage and approximate weight of a battery pack shall be equal to the value of the single cell multiplied by the number of single cell in the battery pack. For example, a battery pack which consisting of 3 cells:

Nominal voltage of single cell=1.2V

Nominal voltage of the battery pack=1.2V×3=3.6V

2, Ratings

Description		Specification	
Model		AA2500	
Size		AA	
Dimensions	Diameter(mm)	14.2±0.2	
	Height(mm)	50.2±0.3	
	Weight(g)	Approx.32g	
Nominal Voltage(V)		1.2	
Nominal capacity(mAh)		2500	
Internal Impedance(mΩ)		≤30	
Discharge Cut-off Voltage		1.0V	
Ambient temperature	Charge	standard	0□ to 40□
		fast	10□ to 40□
	Discharge		-10□ to 50□
	Storage	< 1 year	-10□ to 30□
		< 3 months	-10□ to 40□
		The relative humidity should keep with in 65±20%	

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3. Characteristics

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

Ambient temperature	20±5℃
Relative humidity	65±20%
Atmospheric pressure	960±100mbar

Accuracy of voltmeters and amperometers to be used in testing shall be equal to or better than the grade 0.5,

Test item		Condition		Specification	
1. Charge	Standard	Charge at 0.1C for 16 hours			
	Fast	Charge at 0.5C to -ΔV=5~10mV			
2. Discharge		At 0.2C to 1.0V			
3. Discharge cut-off voltage				1.0V	
4. Capacity (mAh)	Minimum	Standard charge/discharge		2400mAh	
	Typical	Standard charge/discharge		2500mAh	
5. Internal resistance		After fully charge, rest 1 hour, measured at 1000Hz, AC.		≤30mΩ	
6. Self-Discharge		The charged battery is stored for 28 days at 20℃±5℃. And the discharge time is measured at standard discharge		≥180minutes	
7. High temperature test		Store at 40℃、50℃、60℃ for 2 hours then charge/discharge		No leakage	
8. Low temperature test		Store at 0℃ 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	Discharge	Capacity retention ≥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

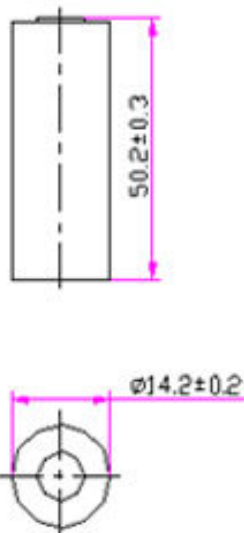
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Ni-MH rechargeable cylindrical cell (Data Sheet)

Specification

Nominal Voltage		1.2V	
Dimensions	Diameter	14.2±0.2mm	
	Height	50.2±0.3mm	
	Apx. Weight	32g	
0.2C Discharge Capacity	Typical	2500mAh	
	Minimum	2400mAh	
Typical Internal Impedance		Less than 30mΩ	
Charge	Standard	250mA for 15~18 hrs	
	Fast	Charge at 0.5~1C to -ΔV=5mV	
Life expectancy		500 cycles	
Operating Temperature	Charge	Standard	0°C to 40°C
		Fast	10°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	

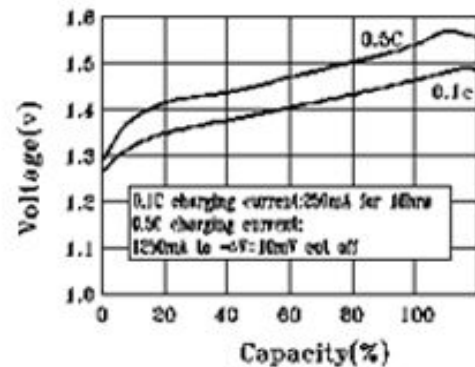
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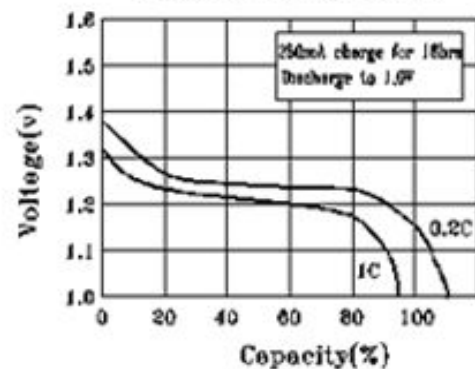
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CHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS AT DIFFERENT TEMPERATURE

