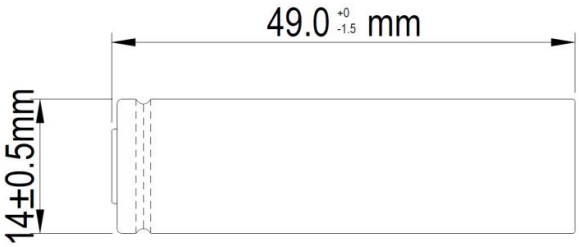
Product Specification

Name:	Ni-Cd Battery
Model:	Ni-Cd AA800mAh1.2V
Stock Code :	900.600.503.004
Author:	Zhenfeng Huang
Review:	Peter
Approval:	Sam
Date:	2017/09/16

Item	Signature 签名	Date 日期
Customer Signature		

1. Image

2. Technical Drawing



3. APPLICATION

Model ： Ni-Cd / PX-KAA800-1.2V

Cell Size：AA ($\varphi 14.0^{\pm 0.5} \times 49.0^{-1.5}$)

4. DATA OF STACK UP BATTERIES

All data involves voltage and weight to stack-up battery are equal to the value of unit cell times the number of unit cell which consisted in the stack-up batteries

Example/:

Stack-up battery consisting three unit cells

Nominal voltage of unit cell=1.2V

Nominal voltage of stack-up batteries=1.2V×3=3.6V

5. RATINGS

Description	Unit	Specification		Conditions
Nominal Voltage	V	1.2		Unit cell
Nominal Capacity	mAh	800		Standard Charge/Discharge
Standard Charge	mA	80(0.1C)		Ambient Temperature: Ta= 20±5℃
	Hour	16		
Trickle Charge		(0.03C)~(0.05C)		Ta = 0~45℃
Standard discharge	mA	160(0.2C)		Ambient Temperature: Ta = 20±5℃ Humidity: Max : 85%
DischargeCut-off Voltage	V	1.0		
Operating temperature range	℃	0~45℃		Humidity: Max : 85%
Storage Temperature	℃	-20~35℃	一年	Fully charged state、Humidity、Max.60%
		0~60℃	一周	Fully charged state、Humidity、Max.80%
Typical Weight	g	Approx.19.5		

6. PERFORMANCE

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:/

Ambient Temperature, T: 20±5℃

Relative Humidity: 65±20%

Test	Unit	Specification	Other Condition	Remarks
Capacity	mAh	800	Standard Charge Discharge	up to 3 cycles are allowed
Open Circuit Voltage(OCV)	V	≥1.25	Within l hour after standardCharge	
InternalImpedanc	m Ω/ Cell	≤35	Upon fully charge(lKHz)	
High Rate Discharge(1.0C)	minute	≥48	Standard Charge, l hour rest Before Discharge by 1.0C to3.0 V	up to 3 cycles are allowed
Overcharge		Noleakagenor explosion	0.1CCharge14 days 0.1C 充电 14 天	
Charge Retention	mAh	≥520(65%)	Standard Charge, Storage：7 day rest at 45Ambient Temperature，Standard Discharge	
IEC Cycle Life	Cycle	≥500	IEC61951-1(2003)7.4.1.1	(see Note)
Leakage Test		No leakage nor deformation	Fully charged at0.5C for 2.5 hour stand for 14 days.	
Security Test		No explosion，but leakage or deformation is allowed	Charge the cell 0.1C 16hrs，Then≤100 mΩImpedance short circuit for 1hour	Ambient Temperature：T=20±5℃
Impact Resistance		Change of voltage should be under 0.02V/ Cell Change of impedance should be under 5 mΩ/ Cell	Charge the cell 0.1C 16hrs Then leave for 1~4hrs,check battery before/after dropped, H eight 50cm Wooden board (thickness 30mm) Direction not specified,3 times.	Ambient Temperature：T=20±5℃
Vibration Resistance	Change of voltage should be under 0.02V/cell,Change of impedance should be under5 milliohm/cell/		Charge the battery 0.1C 16hrs, then leave for 24hrs,check Battery before/after vibration, Amplitude 1.5mmVibration 3000CP M, Any direction for 60mins.	Ambient Temperature：T=20±5℃

7. CONFIGURATION,DIMENSIONS AND PACKINGS

Please refer to the attached drawing.

8. EXTERNAL APPEARANCE

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation.

9. CAUTION

1) Reverse charging is not acceptable.
2) Charge before use. The cells/batteries are delivered in an uncharged state.
3) Do not charge/discharge with more than our specified current.
4) Do not short circuit the cell/battery Permanent damage to the cell/battery may result.
5) Do not incinerate or mutilate the cell/battery.
6) Do not solder directly to the cell/battery.
7) The life expectancy may be reduced if the cell/battery is subjected adverse conditions like: extreme temperature, deep cycling, excessive overcharge/ over-discharge.
8) Store the cell/battery uncharged in a cool dry place. Always discharge batteries before bulk storage or shipment.

Notes:

1) Ambient Temperature.
2) Approximate charge time from discharged state is for reference only.
3) We recommend cells or batteries are charged and discharged at least once every 6 months.
4) IEC61951-1(2003)7.4.1.1 Cycle Life:

Cycle No.	Charge	Rest	Discharge
1	0.1C×16h	None	0.25C×2h20min
2-48	0.25C×3h10min	None	0.25C×2h20min
49	0.25C×3h10min	None	0.25C to 1.0V/ cell
50	0.1C×16h	1-4h	0.2C to 1.0V/ cell
Cycles l to 50 shall be repeated until the discharge duration on any 50th Cycle becomes less than 3 hr			

10. Other

1) The information (subject to change without prior notice) contained in this document is for reference only and should not be used as a basis for product guarantee or warranty
2) Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.