



Alkaline Zn/MnO₂ Battery

Model Number: LR6 AA 1.5V

1 • Summary

This specification defines the Technology for Alkaline cells LR6

1.1 Type

IEC : LR6 Other : AA , E91 , 4006 JIS : AM3

1.2 Reference standard

IEC 60086-1 (2006-12) --- Primary Batteries - Part 1: General

IEC 60086-2 (2006-12) --- Primary Batteries - Part 2: Physical and electrical specification

1.3 Execution standard

GB/T 8897.2-2008

2 • Chemistry composition

Zinc、EMD、Potassium hydroxide、Graphite 。

***0.00% Mercury & Cadmium**

3 • Normal voltage : 1.5V

4 • Average weight : 23.0g

5 • Nominal Capacity

2400mAh (condition:100mA load resistance, discharge 4 hours per day at 20+/-2°C, end-point voltage 0.9V)

6. Electrical performance

(Test condition : Load Resistance ($\pm 0.5\%$) 3.9 Ω , Time: 0.3s, Temperature: 20 $\pm$ 2°C 。)

	O.C.V (V)	C.C.V (V)	Accept Level
≤ 30 days after delivery	1.55	1.45	MIL-STD105E , II , AQL=0.4
45°C for 3 months	1.52	1.40	
Normal temperature for 12 Months	1.52	1.40	

7 • Service Life

(Test condition: +20°C $\pm$ 2°C and 60 $\pm$ 15%RH)

	Discharge Method			Minimum Average Duration		
	Load Resistance	Time	Cutoff Voltage (V)	≤ 30 days after delivery	45°C for 3 months	Normal Temperature for 12 Months
IEC ITEM	43 Ω	4h/d	0.9	93h	92h	91h
	3.9 Ω	1h/d	0.8	8.5h	8.0h	7.5h
	50mA	1/8h 24h/d	1	49h	48h	47h
	100mA	1h/d	0.9	25h	24h	23h
	250mA	1h/d	0.9	8.5h	8.0h	7.5h
	1000mA	10s/m 1h/d	0.9	520time	500time	450time

Inspection Method/Satisfaction Standard:

- 1) 9 pieces of battery will be tested for each discharging standard.
- 2) The result of the Minimum Average Duration from each discharging standard shall be equal to or more than the Minimum Average Duration requirement; and no more than one battery has a service output less than 80% of the specified requirement.
- 3) One re-test is allowed to confirm the previous result

8 • Leakage Resistance

Item	Condition	Test Duration	Result	Accept Level
Over Discharge Test	Test condition: $+20^{\circ}\text{C}\pm 2^{\circ}\text{C}$ and $60\pm 15\%\text{RH}$ Load Resistor: 10Ω Time: 24h/d	Discharge 48h	There shall be no deformation exceeding the specified dimensions, nor leakage recognized by human eye.	N=9 Ac=1,Re=2
High heat and humidity storage test	$60\pm 2^{\circ}\text{C}$ Low 90% RH	35days		N=20 Ac=1,Re=2

9 • Marking

The label printing :

- (1) Type: LR6
- (2) Brand:
- (3) Normal voltage : 1.5V
- (4) Polarity: “+”or“-”
- (5) Warning: Battery may explode or leak if recharged or disposed of in fire.

10 • Caution for use

- (1) Since the battery is not manufactured for recharging, there are risks of electrolyte leakage or causing damage to the device if the battery is charged.
- (2) The battery shall be installed with its “+” and “-” polarity in correct position, otherwise may cause short-circuit.
- (3) Short-circuiting, heating, disposing of into fire and disassembling the battery are prohibited.
- (4) Battery cannot be forced discharged, which lead to excess gassing and, may result in bulging, Leakage and de-crimping of cap.
- (5) New and used batteries cannot be used at the same time, when replaced batteries recommend to replace all and with the same brand type.
- (6) Exhausted batteries should be removed from compartment to prevent over-discharge, which Cause leakage damage to the device.
- (7) Direct soldering is not allowed, which will damage the battery.
- (8) Battery should be kept out of the reach of children to prevent swallow, in case of accident should contact physician at once.

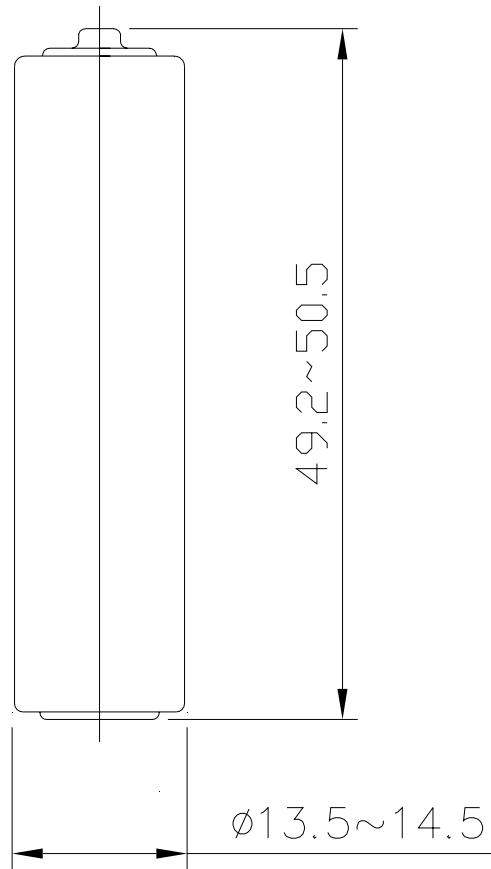
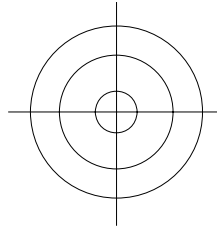
11 • Period of validity : 3 years after delivery under proper storage conditions.

(Temperature: $20\pm 2^{\circ}\text{C}$; Relative humidity: $65\pm 20\%\text{RH}$)

12 • Discharge curve (Figure : 1)

13 • Dimensions (Figure : 2)

unit mm



LR6 DIMENSION