

Power-Xtra LR14/C Size Alkaline Battery

SPECIFICATIONS OF SINGLE CELL

Type Alkaline Battery

Model LR14/C

TECHNICAL INFORMATION

Item	Specifications	Conditions
Nominal Voltage	1.5V	
Typical Capacity	7000 mAh	3,9Ω load resistance, discharge 1 hours per day at 20+/-2°C, end-point voltage 0.8V
Typical Weight	72,5 gr	
Recommended Storage Temperature Range	20+/-2°C	5years after delivery under proper storage conditions.
Recommended Operating Temperature Range	-30° C to 50°	
Shelf Life	5-7 Years	Recommended Storage Range : 20+/-2°C Recommended Humidity Range : 55+/-20%RH

SERVICE LIFE

Application	Test condition			Unit	IEC	Initial		After 12 months	
	Load	Daily period	EV			MAD	Normal	MAD	Normal
Toy	3.9 Ω	1h/d	0.8V	hour	14	22.5	23.5	20.3	21.0
Portable Lighting	3.9 Ω	4min/15min,8h/d	0.9V	min	790	1300	1370	1170	1230
Portable stereo	400mA	2h/d	0.9V	hour	8	13	13.7	11.5	12.0

ELECTRICAL PERFORMANCE

(Load Resistance: $3.9\Omega (\pm 0.5\%)$, Time: 0.3s, Temperature: $20 \pm 2^\circ\text{C}$ 。)

Condition	O.C.V (V)	C.C.V (V)	Accept level
≤ 3 months after delivery	≥ 1.58	≥ 1.40	MIL-STD105E, II, AQL=0.65
After 12 Months	≥ 1.56	≥ 1.35	

(The accuracy of the measuring equipment shall be $\leq 0.25\%$ and the precision shall be $\leq 50\%$ of the value of the last significant digit. The internal resistance of the measuring instrument shall be $\geq 1\text{M}\Omega$.)

SAFETY PERFORMANCE

Item	Conditions	Request	Accept Level
Partial use of battery	Discharge the battery sample that has not been discharged according to the discharge mode with the minimum load resistance of the battery type specified in IEC, and the discharge time is 50% of the minimum average discharge time (MAD). After discharge, store it at $45^\circ\text{C} \pm 5^\circ\text{C}$ for 30 days	No leakage, No fire, No explosion	N=5 Ac=0, Re=1
Drop test	Drop at 1 m height onto concrete 6 times, twice on each the battery's 3 axes.	No fire, No explosion	N=5 Ac=0, Re=1
External Shorting	Short positive and negative terminals with 0.1Ω resistor for 24 hours or battery temperature drop to room temperature.	No fire, No explosion	N=5 Ac=0, Re=1
Wrong Installation	4 batteries connect in series with 1 battery reversed, until the reversed battery leak or OCV drop to nearly 0V.	No fire, No explosion	N=20 Ac=0, Re=1
Over Discharge	One discharged battery is connected in series with three undischarged batteries until the total voltage drops to 2.4V.	No fire, No explosion	N=5 Ac=0, Re=1
Thermal Cycling Shock	Repeat the following temperature cycle 10 times: Heat to $+70^\circ\text{C} \pm 5^\circ\text{C}$ within 30 minutes, hold for 4 hours. Cool to $+20^\circ\text{C} \pm 5^\circ\text{C}$ within 30 minutes, hold for 2 hours. Cool to $-20^\circ\text{C} \pm 5^\circ\text{C}$ within 30 minutes, hold for 4 hours. Heat to $+20^\circ\text{C} \pm 5^\circ\text{C}$ within 30 minutes. After the 10th cycle store batteries for 7 days.	No leakage, No fire, No explosion	N=20 Ac=0, Re=1
Constant temperature and humidity	$60 \pm 2^\circ\text{C}$, $90 \pm 5\%\text{RH}$.	No leakage, No fire, No explosion	N=20 Ac=0, Re=1
Transportation - Vibration	See GB 8897.5-2013 internal inspection conditions for details	No leakage, No fire, No explosion	N=5 Ac=0, Re=1

IMAGE

