

WUXI CITY BAOLAI BATTERY CO.,LTD

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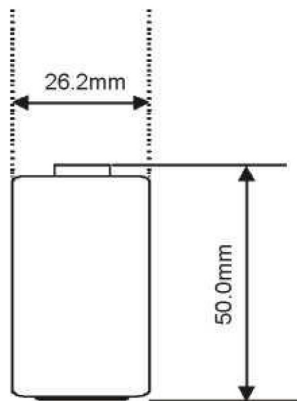
TECHNICAL SPECIFICATION

1.About

alkaline battery

Model# : LR14 / C

Dimension:



Chemical System: Zn/KOH — H₂O/MnO₂

Nominal voltage: 1.5V

Average weight: 68g

Jacket: Foil Label

Reference document: 2006/66/EC,2013/56/EU,GB/T8897.2-2013, IEC60086-1:2011

2.Ratings

Nominal Voltage		1.5V
Temperature Range for operation	Standard Temperature	20°C±2°C
	Special Temperature	30°C±2°C
	High temperature	45°C±2°C
Humidity Range for Storage	Standard Humidity	45%~75%
	Special Humidity	35%~65%
Dimension	Diameter	24.4~24.9mm
	Height	49.5±0.2 mm
Approx weight		68g

3. Electrical Characteristics

Battery status	Off-load voltage (V)	On-load voltage (V)	Short circuit current (A)	Acceptance Standard
Initial within (30days)	1.60	1.53	8	GB2828 commonly sampling AQL=0.4
After 12 months	1.58	1.48	7.5	

Conditions: 3.9Ω±0.5% load resistance, measuring time 0.3 seconds, temperature at 20°C ± 2°C, the hair spring type ampere meter with ±0.5% accuracy (0.5level) shall be used.

4. Service Time

Discharge condition			IEC Standard	Average minimum discharge time	
Discharge load(Ω)	Daily discharge	End voltage (V)		Initial within 30 days	After 12months under 20 °C ± 2°C
3.9 Ω	24h/d	0.9		19 h	18h
3.9 Ω	1h/d	0.9	12 h	20 h	18h
6.8 Ω	1h/d	0.9	23 h	36 h	34h
20 Ω	4h/d	0.9	77 h	110 h	95h

Capacitance: 8.5AH (S.T. 25mA constant-current discharge to 0.8 V)

(Inspect standard: discharge 9 sample-batteries for each condition. It passes when average discharge time is no less than Rated Time and the quantity of the batteries which the value is under 80% of Rated Value is no more than one)

5 .Anti-leakage characteristic

Item	Condition	Period	Characteristics	Inspect standard
Over-discharge characteristics	6.8 Ω continuous discharges At temp. 20°C \pm 2 °C, relative humidity 65% \pm 20%RH	48h	no deformation exceeding the specified dimensions nor visible leakage	N=10 Ac=1 Re=2
Storage characteristics	At temp. 45°C \pm 2°C, relative humidity 70%RH	90 days		N=40 Ac=1 Re=2
	At room temp.	12 month		

6.Safety

Item	Condition	Period	Characteristics	Inspect standard
Short circuit characteristics	Temp.: 20°C \pm 2 °C	24H	There shall be no explosion	N=8 Ac=0 Re=1
Abuse characteristics	Short circuit 4 pieces of battery in series, one of the batteries has to be connected with its polarity reversed	24H	There shall be no explosion	N=8 Ac=0 Re=1

7.Marks:

the following marks will be printed or stamped on the batteries' body

- (1) Model
- (2) Nominal Voltage
- (3) pole
- (4) Warning
- (5) Manufactured Date /Exp date

8.Storage life

Under room temp and suitable environment, its shelf time is 5 years

9.Discharge Curves

Battery Discharge Record Table

DUKECELL

Station:	01 panel 2 row	Discharge Pattern:	24h/d
Type:	1.50V	Manufacturer:	DUKECELL
Load :	3.9Ω	Battery Name:	LR14
End Volt:	0.90V	Brand Name:	
E/P Type:	Normal End	Lot No:	2110020211129
Min.time:	1100.0min	Prod.Date:	2021-11-29
deviation:	94.6%	Start Date:	2022-01-11
Environment:	20℃ RH 50%	End Date:	2022-01-12

	1	2	3	4	5	6	7	8	9	max	min	avg
OCV	1.653	1.654	1.653	1.653	1.653	1.654	1.653	1.653	1.654	1.654	1.653	1.653
CCV(Avg)	1.581	1.578	1.548	1.565	1.560	1.583	1.576	1.581	1.573	1.583	1.548	1.572
Cap(mAh)	5471.4	5358.3	5436.1	5554.8	5416.3	5475.9	5634.5	5544.1	5450.2	5634.5	5358.3	5482.4

Duration time up to each voltage(min)

1.600V	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1.500V	7.3	5.9	2.6	4.8	3.7	7.8	6.6	7.5	6.3	7.8	2.6	5.8
1.400V	44.0	39.5	29.8	39.1	32.8	46.9	43.0	45.1	43.1	46.9	29.8	40.4
1.300V	130.7	118.1	94.5	124.7	104.7	137.9	129.7	133.3	128.4	137.9	94.5	122.4
1.200V	317.9	307.5	258.9	327.8	280.2	337.7	327.9	335.5	327.6	337.7	258.9	313.5
1.100V	635.9	640.4	592.3	668.8	639.9	657.8	657.2	659.3	664.3	668.8	592.3	646.2
1.000V	946.6	946.3	957.0	986.3	960.7	948.8	979.6	969.9	967.8	986.3	946.3	962.6
0.900V	1147.2	1120.6	1155.6	1160.1	1139.6	1142.7	1182.1	1158.1	1135.3	1182.1	1120.6	1149.0

Voltage(V) Battery discharge graph

