





Specification Approval Sheet

Name : Lithium-Manganese Dioxide Battery

Model: AKYGA CR2450

SPEC: 3.0V / 620mAh

Specification Modification Records

Modification Time	Descriptions	Issued Date	Approved By
	Release 1	2024-03-19	

Content

1.Scope:

This specification describes the Product Specification of chargeable Polymer Lithium-Ion Battery produced by AKYGA.



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1. Scope

This specification governs the performance of the following Akyga Lithium Button Cell Akyga model: CR2450.

Designations:

Akyga :	CR2450
IEC:	CR2450
Maxell:	CR2450
SONY:	CR2450
DURACELL:	DL2450

Nominal Voltage: 3V

Typical Weight: about 6.3g

2. Technique parameter

Item		Unit	Standard
Dimensions	Diameter		24.5 (-0.3)
	Height		5.0(-0.4)
Open voltage		V	3.1-3.45
Instant short-circuit current		mA	≥400
Nominal capacity (Load 7.5K Ω)		mAh	620
Appearance	The outward appearance is smooth, bright and clean, no rusty stain		
Min time of discharge	Initial stage (New battery)	h	1600
	Delayed for 12 months		1520
Over-discharge Characteristics		No leakage	



3、Test method

No.	Item	Condition	
1	Dimensions	When measure with vernier calipers whose precision is up 0.02mm. to avord short circuit, should paste on one insulation material on one end of the vernier calipers	
2	Open voltage	the precision of multimeters is not lower than 0.25%, intel resistance is bigger than $1M\Omega$	
3	Instant short-circuit current	When test with multimeters, not surpass 0.5 second each time, avoid duplicating tests, if need once more, the time-gap should above half hour	
4	Appearance	visual	
5	Min time of discharge	Lay aside above 8 hours in the temperature of $20\pm2^{\circ}$ C and under the humidity of $60\pm15\%$ conditions, with the condition that Resistance is $7.5k\Omega$,end-point voltage is 2.0V. The new battery (Initial stage)should be tested in 60 days after produce. The old battery (Delayed for 12 months) should be tested in 14 days after the storage period.	
6	Over-discharge Characteristics	Take nine battery in the temperature of $20\pm2^{\circ}$ C and under the humidity of $60\pm15\%$ conditions, with the condition that Resistance is 7.5 k Ω ,end-point voltage is 1.2V. visual test.	

4、 Acceptance rule

Check Criterion: ISO2859-1:1999(GB/T2828.1-2003),

The concrete item see the sheet of the following :

NO.	Check item		IL	AQL
1	Dimensions		-	Sampling 20
2	Open voltage			0.25
3	Appearance	Cr	Π	0.015
		Maj		0.25
		Min		0.40

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5、Cautions for Use

- 5.1 The battery shall be installed with its "+" and "-" polarity in a correct position, otherwise may cause short-circuit.
- 5.2 Short-circuiting, heating, disposing of into fire or disassembling of battery is prohibited.
- 5.3 Battery can not be forced discharged, which leads to excess gassing and may result in bulging, leakage or explosion.
- 5.4 New batteries and used ones can not be used at the same time. It is recommended to use the same brand when replacing batteries.
- 5.5 Direct soldering is not allowed, or else it will damage the battery.
- 5.6 Battery are to be kept away from children. If swallowed, contact a physician at once.

6, Storage Environment

The environment temperature at 0 to 30 $^{\circ}$ C, RH not more than 75% is proper.Keep the environment sweep, cool, dry, well ventilated and should not close to heat high and wet place.

7、 Marking and package

Basis customer request

8. Discharge Characteristics (Initial stage, Load 7.5K Ω ,24h/d, EPV 2.0 V)

