



Product Name: lithium manganese dioxide battery

Type: CR2016

Lithium Manganese Battery

PRODUCT SPECIFICATION

Version: 2012

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1. Scope

This specification governs the performance of the following Akyga Lithium Button Cell model: CR2016.

Designations:

Akyga: CR2016
IEC: CR2016
MAXELL: CR2016
SONY: CR2016
DURACELL: DL2016

Nominal Voltage: 3V

Typical Weight: 1.9 g

2. Technique parameter

Item		Unit	Standard
Dimensions	Diameter	mm	20.0 (-0.2)
	Height		1.6 (-0.2)
Open voltage		V	3.1-3.40
Instant short-circuit current		mA	≥ 300
Nominal capacity (Load 30K Ω)		mAh	90
Appearance	The outward appearance is smooth, bright and clean, no rusty stain		
Min time of discharge	Initial stage (New battery)	h	910
	Delayed for 12 months		860
Over-discharge Characteristics		No leakage	

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3、Test method

No.	Item	Condition
1	Dimensions	When measure with vernier calipers whose precision is up 0.02mm. to avoid 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 Ω
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 $20\pm 2^{\circ}\text{C}$ and under the humidity of $60\pm 15\%$ conditions, with the condition that Resistance is 30 k Ω ,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 $20\pm 2^{\circ}\text{C}$ and under the humidity of $60\pm 15\%$ conditions, with the condition that Resistance is 30 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		I	Sampling 20
2	Open voltage			0.25
3	Appearance	Cr	II	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 °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 30K Ω , 24h /d, EPV 2.0 V)

