

Datasheet

Lithium Manganese Dioxide Coin Button Battery

RS Stock number 494-2425



Description:

Non-rechargeable lithium coin cells CR type suitable for intermittent high load applications Long shelf life

Applications: memory support, watches, calculators and cameras

Specifications:

Capacity: 610 mAh

Chemistry: Lithium Manganese Dioxide

Diameter: 24.5 mm

Nominal Voltage: 3 V

Operating Temperature Range: -30 – 60 °C

Size: CR2450
Terminal Type: Standard



Ratings:

ITEM		UNIT	SPECIFICATIONS	CONDITIONS
Nominal voltage		V	3.0	Standard discharge
Nominal capacity		mAh	540	Standard discharge
Instantaneous short-circuit		t	≥350	Time≤0.5second
current		mA		
Off-load voltage		V	≥3.20	Unit cell
Storage temperature		°C	0-35	
Standard weight		g	6.5	Unit cell
Service output	Initial	h	496	Continuous discharge with load 3 $k\Omega$, till 2.0v
	After 12 month		400	end-voltage at 20-25°C
	After 12 month storage	5 h	486	

ITEM	CONDITIONS	CHARACTERISTICS
Self-discharge rate	Stored for 12 months at normal temperature, then continuously discharged with 15 $k\Omega$ load till 2.0v end-voltage	Less than ≤2%

Performance and Test Methods:

Unless otherwise stated, all the testing is carried out under the condition: environmental temperature 20°C - 25°C ; environmental humidity $65 \pm 20\%$

Suggestions and Cautions:

- 1. Install batteries correctly
- 2. Ensure the contact points to be clean and conductive
- 3. Do not mix different types, different brands batteries to serve together
- 4. Do not heat, recharge the batteries
- 5. Do not dispose of the batteries in fire
- 6. Keep away from small children, if swallowed promptly see a doctor
- 7. Pay attention to the producing date



NO	ITEM	TEST METHODS	STANDARED
1	Dimensions	Using vernier caliper(accuracy ≥ 0.02) while avoiding short-circuit	Diameter 24.5(- 0.15)mm
			Height 5.00(- 0.20)mm
2	Off-load voltage	Using multimeter(accuracy \geq 0.25%)internal resistance \geq 1M Ω	≥3.20V
3	Instantaneous Short-circuit current	Time of short-circuit should be less than 0.5 Second and avoid repeated test within half An hour	≥350mA
4	Appearance	Eyeballing	Bright ,clean, no rust, no leakage, And no flaw
5	Capacity	Continuously discharge for 8 hour with load 3 k Ω , temperature at 20-25°C, humidity at 65 \pm 20% till 2.0v end-voltage(for fresh battery only: within 3 months)	≥478h
6	Vibration test	Put battery on the platform of the vibrations Machine, start the machine and adjust the Frequency form 10 times per minute to 15 Times per minute. keep it running for an hour	Characteristics keep stability
7	Leakage at high temperature	Stored under temperature(45°C)for 30 days	Leakage rate≤0.5%
8	Over Discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No leakage allowed



Discharge Characteristics:

With load 3.0 $k\Omega$ (CR2450)



