

1. SCOPE

This specification applies to the following 3.0v lithium button cell CR2450

2. RATINGS

TABLE

ITEM	UNIT	SPECIFICATIONS	CONDITIONS	
Nominal voltage	V	3.0	Standard discharge	
Nominal capacity	mAh	550	Standard discharge	
Instantaneous short-circuit current	mA	•250	Time •0.5 second	
Off-load voltage	V	•3.30		
Storage temperature	°C	0~35		
Standard weight	g	6.2	Unit cell	
Service output	Initial	Standard	1300 h	Continuous discharge with load 7.5kΩ, till 2.0v end-voltage at 20~25°C
		Minimum	1250 h	
	After 12 months storage	Standard	1240 h	
		Minimum	1180 h	

ITEM	CONDITIONS	CHARACTERISTICS
Self-discharge rate	Stored for 12 months at normal temperature, then continuously discharged with 15kΩ load till 2.0v end-voltage	•5%

3. 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±20%. Please refer to Table •

4. SUGGESTIONS AND CAUTIONS

- 4.1 Install batteries correctly.
- 4.2 Ensure the contact points to be clean and conductive.
- 4.3 Do not mix different types, different brands batteries to serve together.
- 4.4 Do not heat, recharge the batteries.
- 4.5 Do not dispose of the batteries in fire.
- 4.6 Keep away from the small children, if swallowed promptly see doctor.
- 4.7 Pay attention to the producing date.

TABLE :

No	ITEM	TEST METHODS	STANDARD	
1	Dimensions	Using vernier caliper (accuracy•0.02) while avoiding short-circuit	Diameter	24.5 (-0.20) mm
			Height	5.0 (-0.20) mm
2	Off-load voltage	Using multimeter (accuracy•0.25%) internal resistance•1M Ω	•3.30v	
3	Instantaneous short-circuit current	Time of short-circuit should be less than 0.5 second and avoid repeated test within half an hour	•250 mA	
4	Appearance	Eyeballing	Bright, clean, no rust, no leakage, And no flaw	
5	Capacity	Continuously discharge for 8 hours with load 7.5k, temperature at 20~25 $^{\circ}$ C, humidity at 65 \pm 20% till 2.0v end-voltage (for fresh battery only: within 3 months)	•1300h	
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 $^{\circ}$ C) for 30 days	Leakage rate•0.6%	
8	Over discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No leakage allowed	