APPROVAL SHEET

MESSRS	
BRAND	GM 3 POWER®
PRODUCT	3.0V LITHIUM-MANGANESE BUTTON CELL
MODEL	CR2477 (900mAh)
PREPARED BY	
APPROVED BY	
DATE	

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1. [SCOPE]

This specification applies to the following 3.0v lithium button cell CR2477 made by GUANGZHOU MARKYN BATTERY CO., LTD.

2. [RATINGS]

TABLE I:

ITEM		UNIT	SPECIFICATIONS	CONDITIONS	
Nominal voltage		V	3.0	Standard discharge	
Nominal capacity		mAh	900	Standard discharge	
Instantaneous short–circuit current		mA	≥250	Time≤0.5 second	
Off-load voltage		V	≥3.30		
Storage temperature		$^{\circ}$	0~35		
Standard weight		g	8.5	Unit cell	
Service	Initial Standard	930 h	Continuous discharge with load 3kΩ, till 2.0v		
output	After 12 months storage	Standard	880 h	end-voltage at 20~25°C	

TABLE II:

ITEM	CONDITIONS	CHARAC ⁻	TERISTICS
Thermal durability	Kept for 20 days at $60^{\circ}\text{C}\pm3^{\circ}\text{C}$, then continuously discharge with $3k\Omega$ load till 2.0v end-voltage	Standard	880 h
Self-discharge rate	Stored for 12 months at normal temperature and humidity	<u> </u>	5 %

3. **[PERFORMANCE AND TEST METHODS]**

Unless otherwise stated, all the testing is carried out under the condition: environmental temperature, $20^{\circ}\text{C} \sim 25^{\circ}\text{C}$; environmental humidity, 65±20%. Please refer to Table III

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.



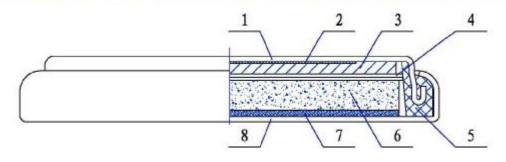
TABLE III:

No	ITEM	TEST METHODS	STA	ANDARED
1	Dimensions	Using vernier caliper (accuracy≥0.02) while	Diameter	24.5 (-0.20) mm
Į.	Difficitions	avoiding short-circuit	Height	7.7 (-0.20) mm
2	Off-load voltage	Using multimeter (accuracy \geqslant 0.25%) internal resistance \geqslant 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 $3k\Omega$, temperature at $20\sim25^{\circ}C$, humidity at 65 $\pm20\%$ till 2.0v end-voltage (for fresh battery only: within 3 months)		≽930 h
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	Characteris	stics keep stability
7	Leakage at high temperature	tored under temperature (60°C) for 20 days No leakage allowed		kage allowed
8	Over discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No lea	kage allowed

5. 【CUTAWAY DIAGRAM OF 3.0V LITHIUM MANGANESE DIOXIDE BUTTON CELL】

3.0V锂—二氧化锰扣式电池剖面图

Cutaway Diagram of 3.0V Lithium Manganese Dioxide Button Cell



- 1、负极壳
- 2、负被集流网
- 6、正被片
- 3. 负极锂片
- 4、隔膜

5、密封胶周

- 7、正极粲流网
- 8、正极壳

- Cathode Shell
- 2. Cathode collector net
- Cathode (slice of lithium)
 Anode reflector net
- 4. Septum

- 5, Gasket
- 6、Anode(MnO_t)
- 7. Anode collector net
- 8, Anode shell



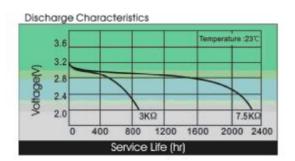
6. [DISCHARGE CHARACTERISTICS]

CR2477_(900mAh)

外形 APPEARANCE



STANDAGO CHADACTEDISTOS



规格 SPECIFICATIONS

됐 명 Model	CR2477	Dimensions(mm)
标称电压 Nominal Voltage	3(V)	
标称容量 Nominal Capacity	900 (mAh)	()
标准电阻 Load Resistance	4.7(K±)	14
34 fet Weight	8.5(g)	
使用温度 Using Temperature	-20 U~60 U	⊕ ±3,



