APPROVAL SHEET

MESSRS	
BRAND	
PRODUCT	3.0V LITHIUM-MANGANESE BUTTON CELL
MODEL	CR2354
PREPARED BY	
APPROVED BY	
DATE	JUN. 19, 2020

CUSTOMER APPROVAL RECORD			
COMPANY NAME	DEPART-MENT	APPROVED BY	DATE

1. 【SCOPE】

This specification applies to the following 3.0v lithium button cell CR2354

2. 【RATINGS】

TABLE Ⅰ:

ITEM		UNIT	SPECIFICATIONS	CONDITIONS
Nominal voltage		V	3.0	
Nominal capacity		mAh	530	Standard discharge with load 7.5kΩ
Instantaneous short–circuit current		mA	≥250	Time≤0.5 second
Off-load voltage		V	≥3.20	
Operating temperature		℃	-20~60	
Standard weight		g	6.3	Unit cell
Service output	Initial	Standard	1490 h	Continuous discharge with load 7.5kΩ, till 2.0v end-voltage at 20~25℃
	After 12 months storage	Standard	1405 h	

TABLE Ⅱ:

ITEM	CONDITIONS	CHARACTERISTICS	
Thermal durability	Kept for 20 days at 60℃±3℃, then continuously discharge with 7.5kΩ load till 2.0v end-voltage	Standard	1405 h
Self-discharge rate	Stored for 12 months at normal temperature and humidity	≤5%	

3. 【PERFORMANCE AND TEST METHODS】

Unless otherwise stated, all the testing is carried out under the condition: environmental temperature, 20℃~25℃; 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.

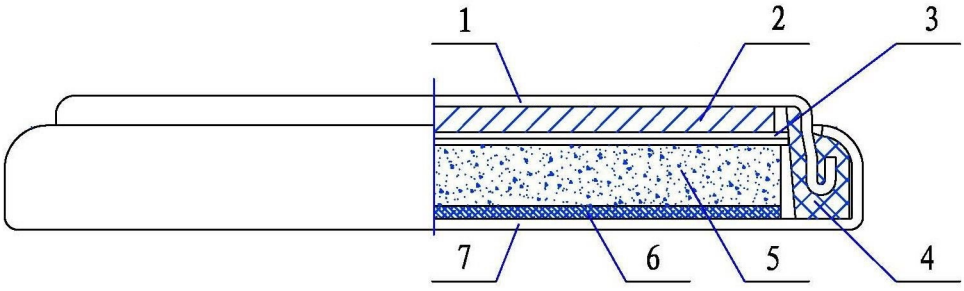
TABLE Ⅲ:

No	ITEM	TEST METHODS	STANDARED	
1	Dimensions	Using vernier caliper (accuracy≥0.02) while avoiding short-circuit	Diameter	23.0 (-0.20) mm
			Height	5.4(-0.20) mm
2	Off-load voltage	Using multimeter (accuracy≥0.25%) internal resistance≥1MΩ	≥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	≥250 mA	
4	Appearance	Eyeballing	Bright, clean, no rust, no leakage, And no flaw	
5	Capacity	Continuously discharge for 8 hours with load 7.5kΩ, temperature at 20~25℃, humidity at 65±20% till 2.0v end-voltage (for fresh battery only: within 3 months)	≥1490 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	Characteristics keep stability	
7	Leakage at high temperature test	Stored under temperature 60℃) for 7 days	No leakage allowed	
8	Over discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No leakage 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、负极锂片　3、隔膜　4、密封胶圈
5、正极片　6、正极集流网　7、正极壳

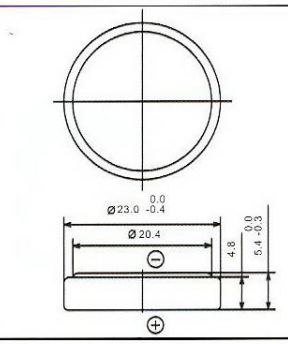
1、Cathode Shell　2、Cathode (slice of lithium)　3、Septum　4、Gasket
5、Anode (MnO_2)　6、Anode collector net　7、Anode shell

6. 【DISCHARGE CHARACTERISTICS】

规格参数 SPECIFICATIONS

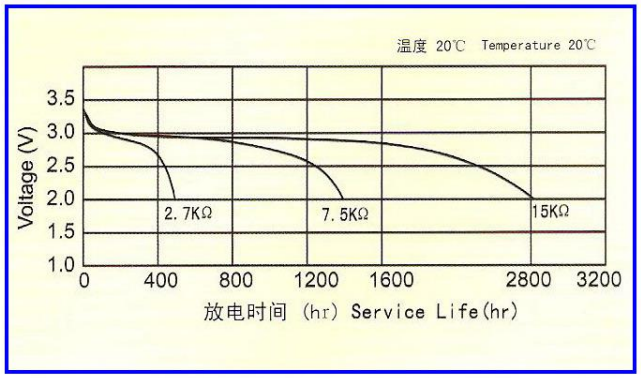
CR2354

型 号 Model No.	CR2354	结 构 图 Dimensions（mm）
标称电压 Nominal Voltage	3（V）	
标称容量 Nominal Capacity	530（mAh）	
标准电阻 Load Resistance	7.5（kΩ）	
重 量 Weight	6.3（g）	
使用温度 Using Temperature	-20℃~60℃	

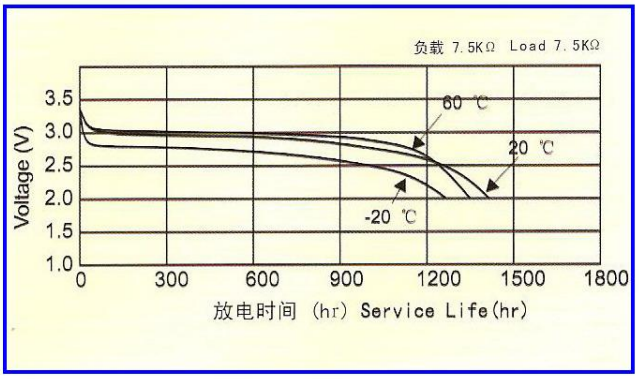


标准曲线 STANDARD CHARACTERISTICS

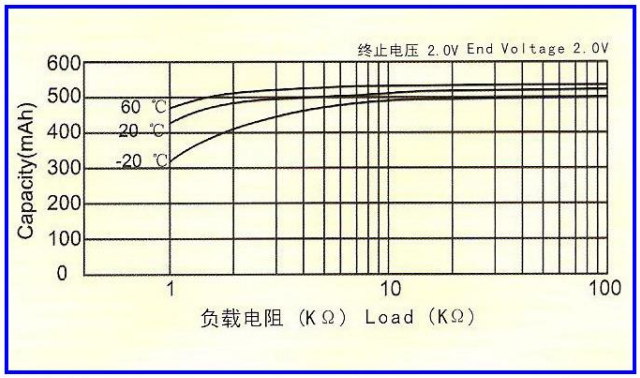
定电阻放电曲线
Discharge Characteristics



温度放电曲线
Temperature Characteristics



电阻容量曲线
Load-capacity



脉冲放电曲线
Pulse Discharge Characteristics

