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# TECHNICAL SPECIFICATION

## LITHIUM MANGANESE DIOXIDE BUTTON BATTERY

MODEL: AGFAPHOTO CR1220

Typed/制作	SAM LUO
Approved/审批	KEN LEE
Date/日期	2023

The Manufacturer reserves the right to modify product specification and data stated herein without prior notice

## 1. Scope

This specification applies to lithium manganese dioxide button battery supplied by GBT GmbH

Model: CR1220

Reference Document: IEC60086-1-2021, IEC60086-2-2021  
GB/8897-1-2021, GB/8897-2-2021

2. Nominal Voltage 3.0V

3. Nominal Capacity 40mAh

Condition: Continuous discharge at  $20\pm 2^{\circ}\text{C}$  under load  $62\text{k}\Omega$  for 24 hrs/day to EPV 2.0V

4. Continuous discharge current 1mA

5. Off-load Voltage  $\geq 3.2\text{V}$

Acceptance Standard: MIL-STD-105E, Class II, Double Sampling, AQL=0.4

6. Temperature Range  $-30\sim 70^{\circ}\text{C}$

7. Average Weight 0.75g

8. Chemical System Li/MnO<sub>2</sub>

## 9. Discharge Performance

	Minium AverageDuration (h)	Conditions
New battery Tested within 30days after delivery	965	Continuous discharge at $20\pm 2^{\circ}\text{C}$ , $55\pm 20\text{RH}\%$ under load $62\text{k}\Omega$ for 24 hrs/day to EPV
After 3 mth.at $45\pm 2^{\circ}\text{C}$	905	

Acceptance Standard

- (1) Test nine batteries
- (2) Calculate the average without the exclusion of any result
- (3) If this average is equal to or greater than the specified figure and no more than one

battery has a service output of less than 80% of the specified figure, the battery are considered to conform to service output.

(4) One re-test is allowed to confirm the previous result.

## 10. Leakage

Item	Requirements	Test Condition
Leakage	No Leakage	45±2℃,55±20RH%, 30days

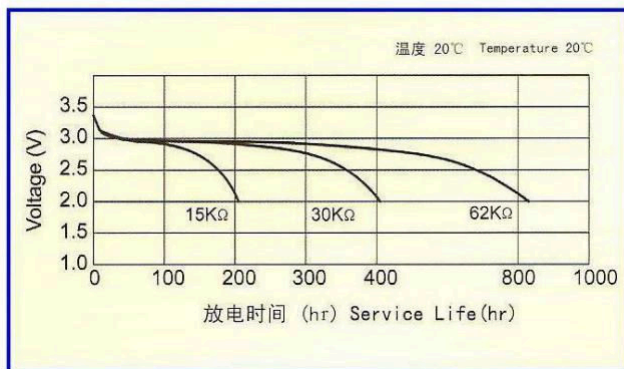
11. Self-discharge: ≤1%/year (Condition: 20±2℃,55±20RH%,12mth)

12. Shelf Life: 1 year (Condition: 20±2℃,55±20RH%)

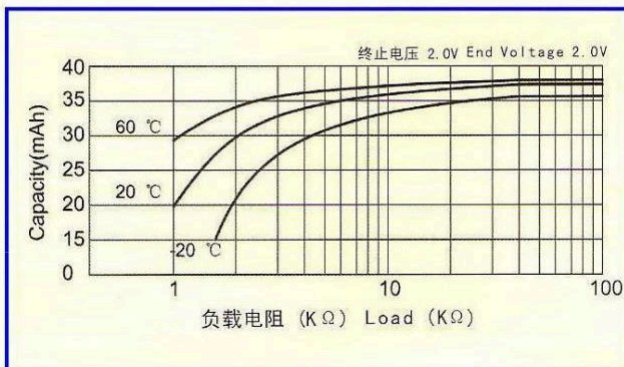
## 13. DischargeCharacteristics

### 标准曲线 STANDARD CHARACTERISTICS

定电阻放电曲线  
Discharge Characteristics

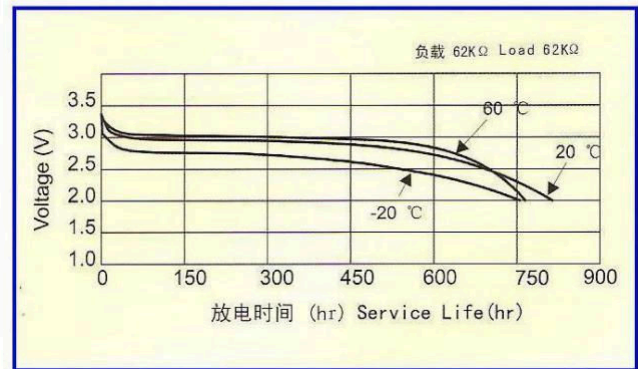


电阻容量曲线  
Load-capacity



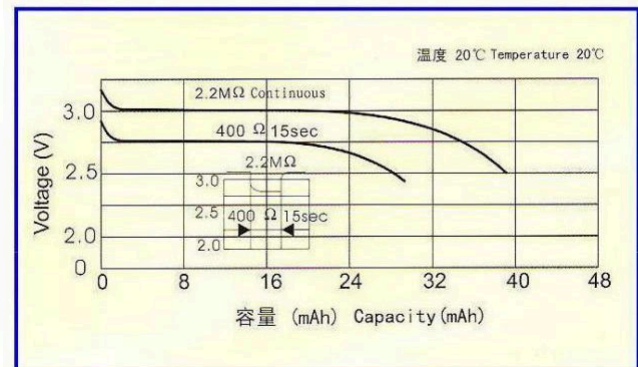
温度放电曲线

Temperature Characteristics 终止电压 2.0V 负载 62KΩ



脉冲放电曲线

Pulse Discharge Characteristics

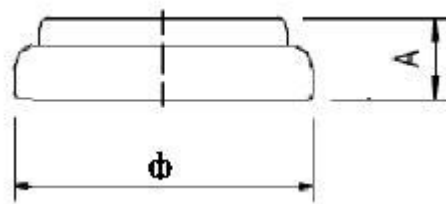


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#### 14. Compliance & Environmental Information

This product complies with EU Battery Directive 2006/66/EC, RoHS

#### 15. Battery Dimensions



$\Phi=12.2\sim12.5\text{mm}$      $A=1.8\sim2.1\text{mm}$

#### 16. Caution for Use

- (1) The battery shall be installed with its “+” and “-” polarity in correct position, otherwise may cause short circuit.
- (2) Short-circuiting, heating, disposing of into fire and disassembling the battery are prohibited
- (3) New and used batteries cannot be used at the same time.
- (4) Keep away from the small children, if swallowed promptly see doctor.
- (5) Do not recharge the batteries.

#### 17. Marking on battery

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|---------------------------|-----------|
| (1) Model                 | CR1220    |
| (2) Voltage               | 3V        |
| (3) Polarity Marking      | “+”       |
| (4) Brand of manufacturer | AGFAPHOTO |
| (5) Others                |           |