
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 $20\pm2^{\circ}\text{C}$ 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/MnO₂

9. Discharge Performance

	Minimum Average Duration (h)	Conditions
New battery Tested within 30days after delivery	965	Continuous discharge at $20\pm2^{\circ}\text{C}, 55\pm20\text{RH\%}$ under load $62\text{k}\Omega$ for 24 hrs/day to EPV
After 3 mth.at $45\pm2^{\circ}\text{C}$	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°C, 55±20RH%, 30days

11. Self-discharge: $\leq 1\%$ /year (Condition: 20±2°C, 55±20RH%, 12mth)

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

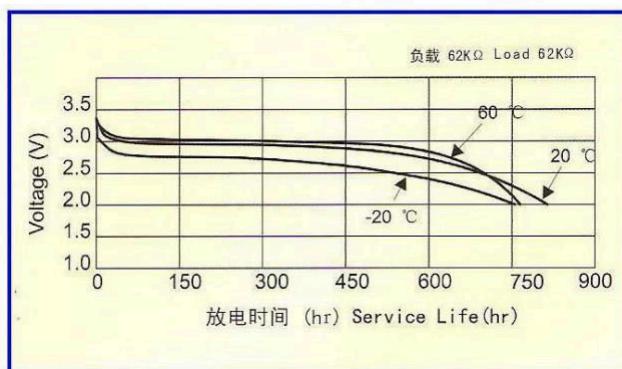
13. Discharge Characteristics

标准曲线 STANDARD CHARACTERISTICS

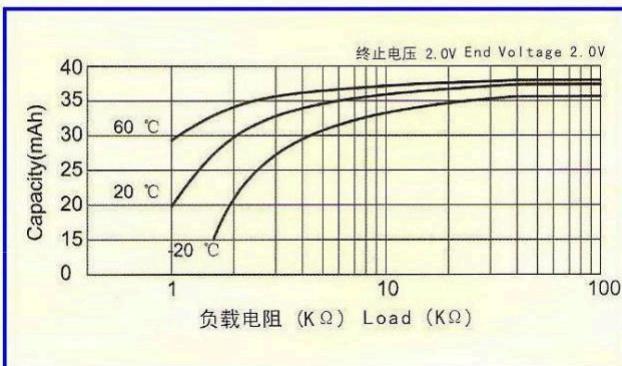
定电阻放电曲线
Discharge Characteristics



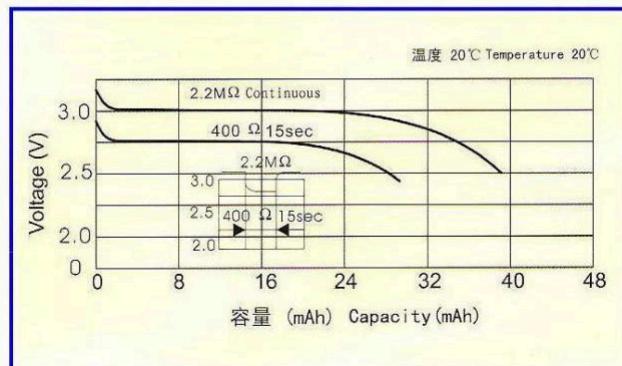
温度放电曲线
Temperature Characteristics
终止电压 2.0V 负载 62KΩ



电阻容量曲线
Load-capacity



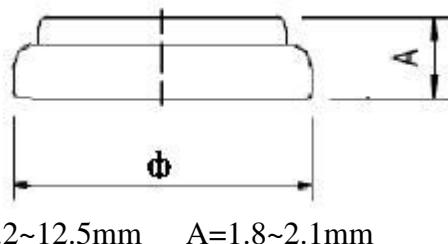
脉冲放电曲线
Pulse Discharge Characteristics



14. Compliance & Environmental Information

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

15. Battery Dimensions



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

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