27A

TECHNICAL SPECIFICATION

ALKALINE ZINC MANGANESE DIOXIDE BATTERY

PREPARED BY:

APPROVED BY:

2021-05-10

SPEC.NO: **A27**

ALKALINE ZINC MANGANESE DIOXIDE BATTERY

1、Scope

The specification is applicable to ALKALINE BATTERY 27A。

1.1 Designations

IEC	Other
27A ----	L828、A27、MN27、MS27、V27GA、LR27A

1.2 Reference Document

IEC 60086-1：2000 ---Primary Batteries – General
IEC 60086-2：2001 ---Primary Batteries - Specification Sheets
GB/T8897.1—2008 ---Primary Batteries – General

2、Chemical System

Alkaline-Manganese Dioxide (-) Zn | KOH | MnO_2(+)

3、Nominal Voltage: 12.0 volt

4、Average Weight: 4.8g

5、Nominal Capacity

22mAh （20kΩload resistance, discharge 24hours per day at 20±2℃, E.P.V 6V。）

6、Electrical Characteristics

(Conditions : 1000Ω±0.5% load resistance, measuring time 0.3seconds, 20±2℃, tested within 30 days after delivery)

	Off-load voltage (V)	On-load voltage (V)	Acceptance Standard
New battery	12.3	11.3	MIL-STD105E, Class ll, Double Sampling, AQL=0.4
After 12 mon. room temp.	12.1	10.8	

7、Service Output

(Conditions : Test temp. 20±2℃, tested within 30 days after delivery。)

	Discharge Condition			Average Minimum Discharge Time	
	Discharge Load	Daily Discharge time	End Point Voltage(V)	New battery	After 12mth.at room temp.
Standard	20kΩ	24h	6.0	45h	40h
Reference	1KΩ	1S/4S,24h	6.0	9000times	8100times

Acceptance Standard：

(1) 9 pieces of battery will be tested for each discharging standard .
(2) The result of the average discharging time from each discharging standard shall be equal to or more than the average minimum time requirement.

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8、*Electrolyte Leakage Proof Characteristics*

Item	Condition	Periods	Characteristics	Acceptance Standard
Over-discharge Characteristics	20kΩcontinuous discharge at temp. 20±2℃, Relative Humidity : 65±20%RH	Continuous discharge 48 hours after discharge termination	There shall be no leakage or explosion recognized by human eye	N=9, Ac=0, Re=1

9、*Marking*

The following markings will be printed, stamped or impressed on the body of the battery:

(1) Designation：A23

(2) Manufacturer's name or abbreviation：AKYGA

(3) Nominal voltage：12V ；

(4) Polarity："+" or "-";

10、*Caution for Use*

(1) Since the battery is not manufactured for recharging, there are risks of electrolyte leakage or causing damage to the device if the battery is charged.

(2) The battery shall be installed with its "+"and "-"in correct position.；

(3) Short circuiting, heating, throwing into fire and disassembling the battery shall not be done.。

11、*Discharge Curves:*

(Condition: Test temperature 20±2℃)

Discharge Method ： 20kΩ 24hrs/day / 1kΩ 1S/4S,24h (Figure 1、2)

12、*Battery Dimension and construction*

（Refer Drawing：A27）

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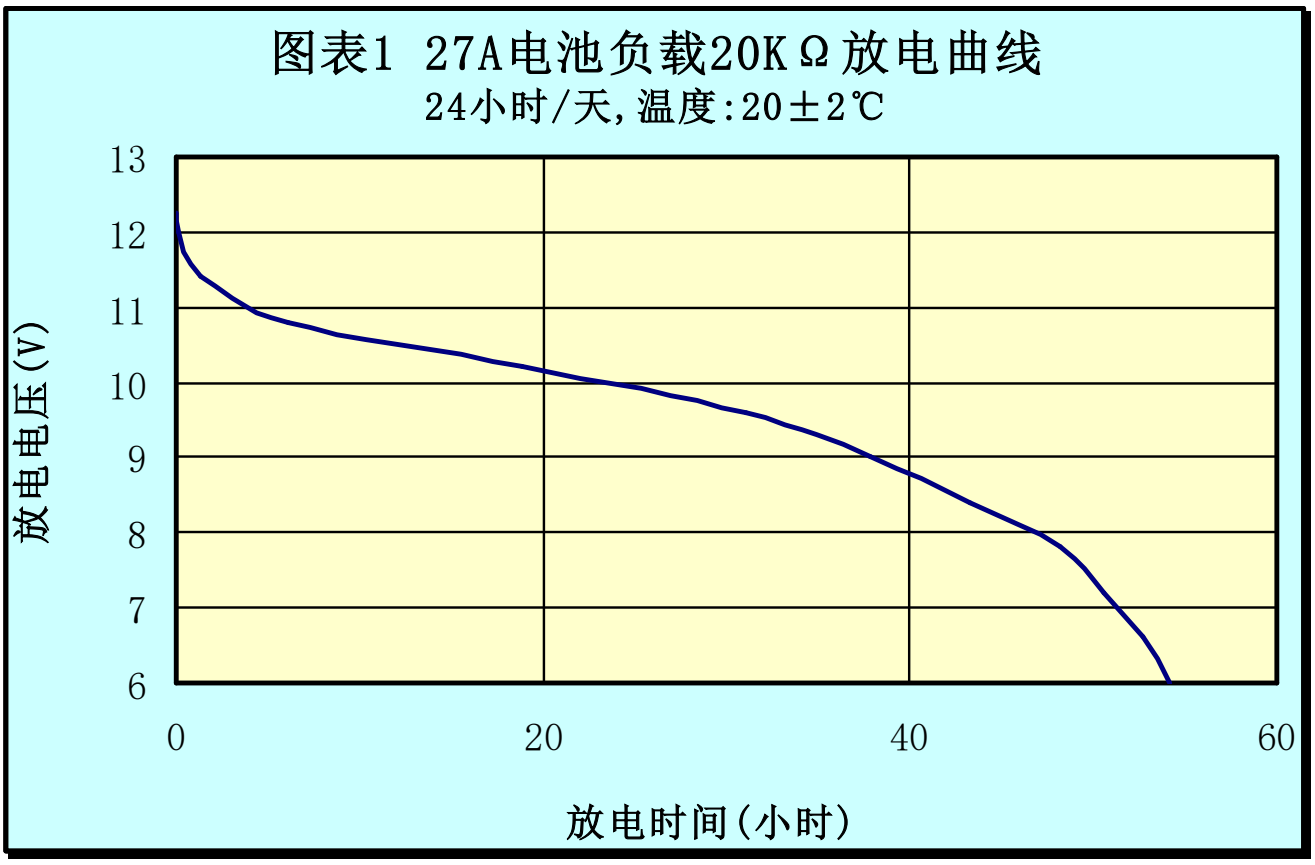
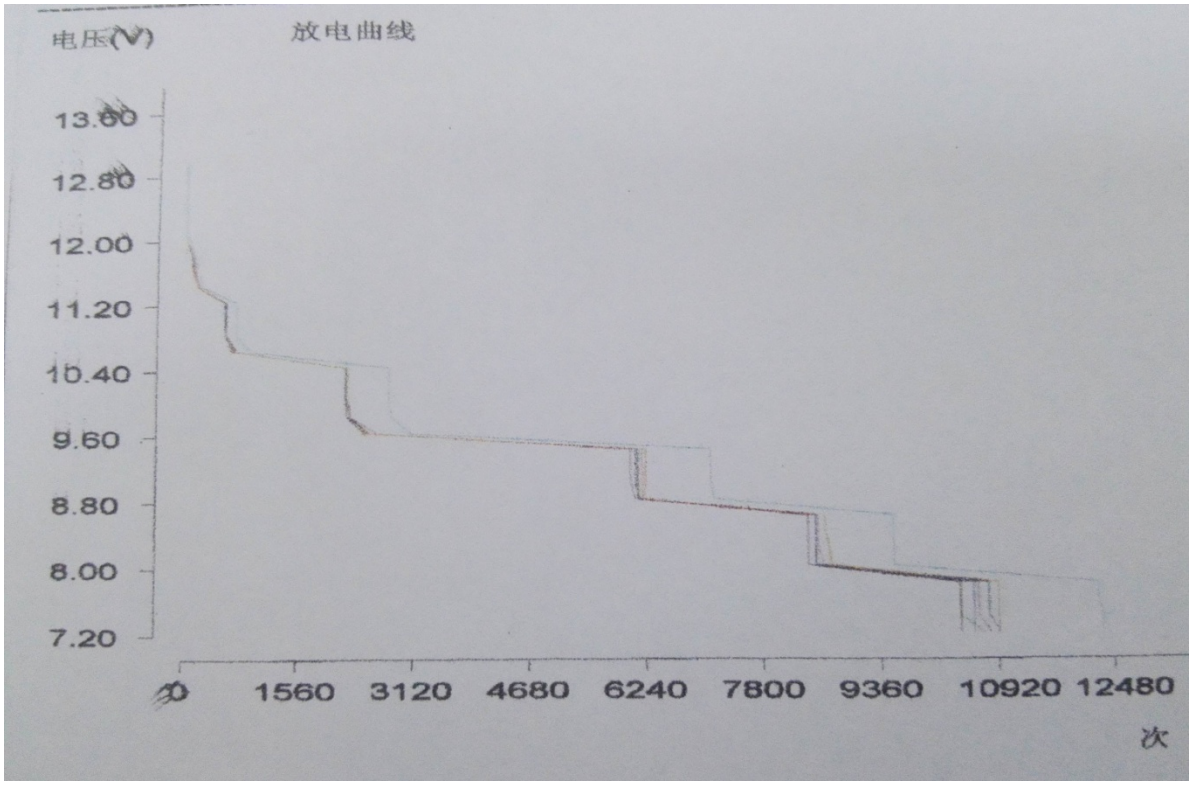


27A

脉冲 1S/4S，24hrs/天，终止 6.0V



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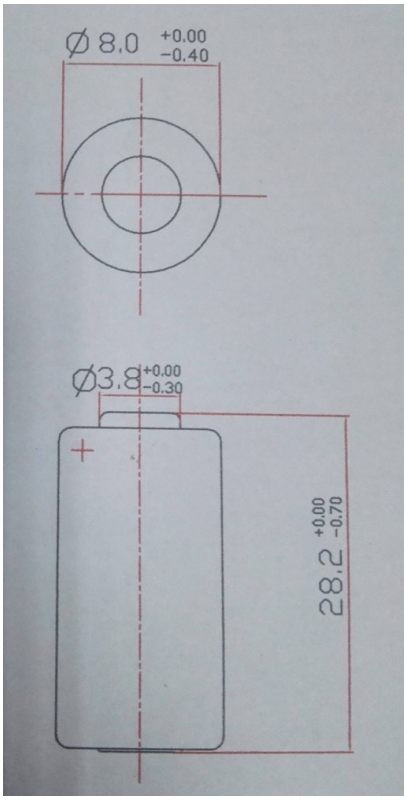
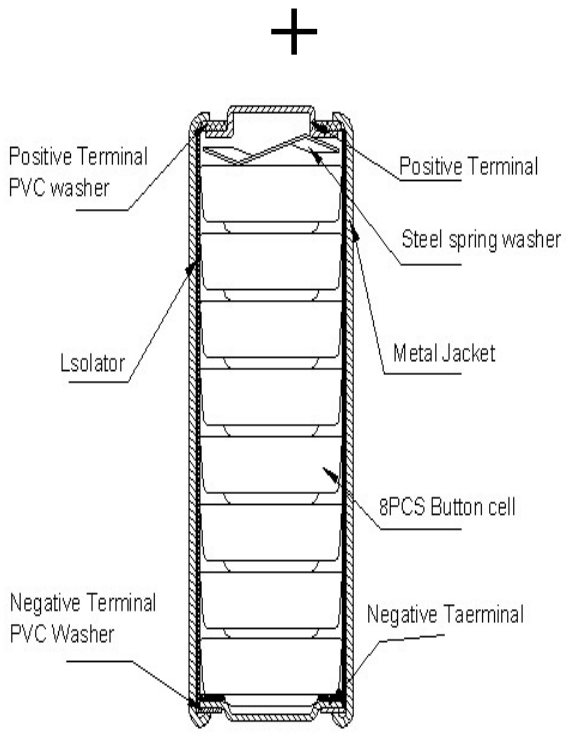
Refer Drawing: A27

Unit： mm



Construction:



SIGNATURE		Date	akyga					
DRAWN			Model	27A Alkaline Battery				
APPD.			No.	A27	Ver.	A	Scale	NTS