TECHNICAL SPECIFICATION

1. Scope:

1.1 Designations
IEC & GB: LR20
JIS: AM-1
ANSI: D

1.2 Reference Document
IEC 60086-1 :2021 --- Primary Batteries - Part 1: General
IEC 60086-2 :2021--- Primary Batteries - Part 2: Physical and electrical specification
GB8897.1:2021 …Primary Batteries-Part1:General
GB8897.2-2021 …Primary Batteries-Part2:Physical and Electrical Specification

2. Chemical System:

Alkaline Zinc-Manganese Dioxide (KOH Electrolyte): (-) Zn | KOH | MnO2(+)
0% Mercurio (Hg) y 0% Cadmio (Cd).

3. Nominal Voltage: 1.5 V

4. Average Weight: approximate 140 g

5. Nominal Capacity:

Designed for alkaline applications in compliance with IEC standards

6. Electrical characteristics:

Conditions: 3.9Ω±0.5% load resistance, measuring time 0.3 seconds, temperature at 20±2℃.

Testing time	Open Circuit Voltage (V)	On-Load Voltage (V)	Acceptance Level
Delivery within30 days	≥1.60	≥1.50	MIL-STD105E, Ⅱ, AQL=0.4
After 12months	≥1.58	≥1.45	

7. Resistance to leakage

Item	Condition	Period	Characteristics	Acceptance Level
Over-discharge leakage test	3.9Ω continuous discharge at temp. 20±2℃, 60±15%RH	Uninterrupted discharge for 0.6V	There is no visible leakage.	**N=8 Ac=0 Re=1**
Temperature & Humidity test	At temp.70±2℃ Relative Humidity: 90± 5%RH	10 days		**N=40 Ac=1 Re=2**

8. Safety Characteristics

Item	Condition	Period	Characteristics	Accepted Levels
Short circuit test	Temp.: 20±2℃	24hours	There shall be no explosion of battery.	N=5 Ac=0 Re=1
Abusive test	At temp. 20±2℃, short circuit 4 pieces of battery in series, one of the 4 battery has to be connected with its polarity reversed	24hours		

Solid material inside the battery sprays out and the sprayed material reaches 25cm.

9. Caution for use



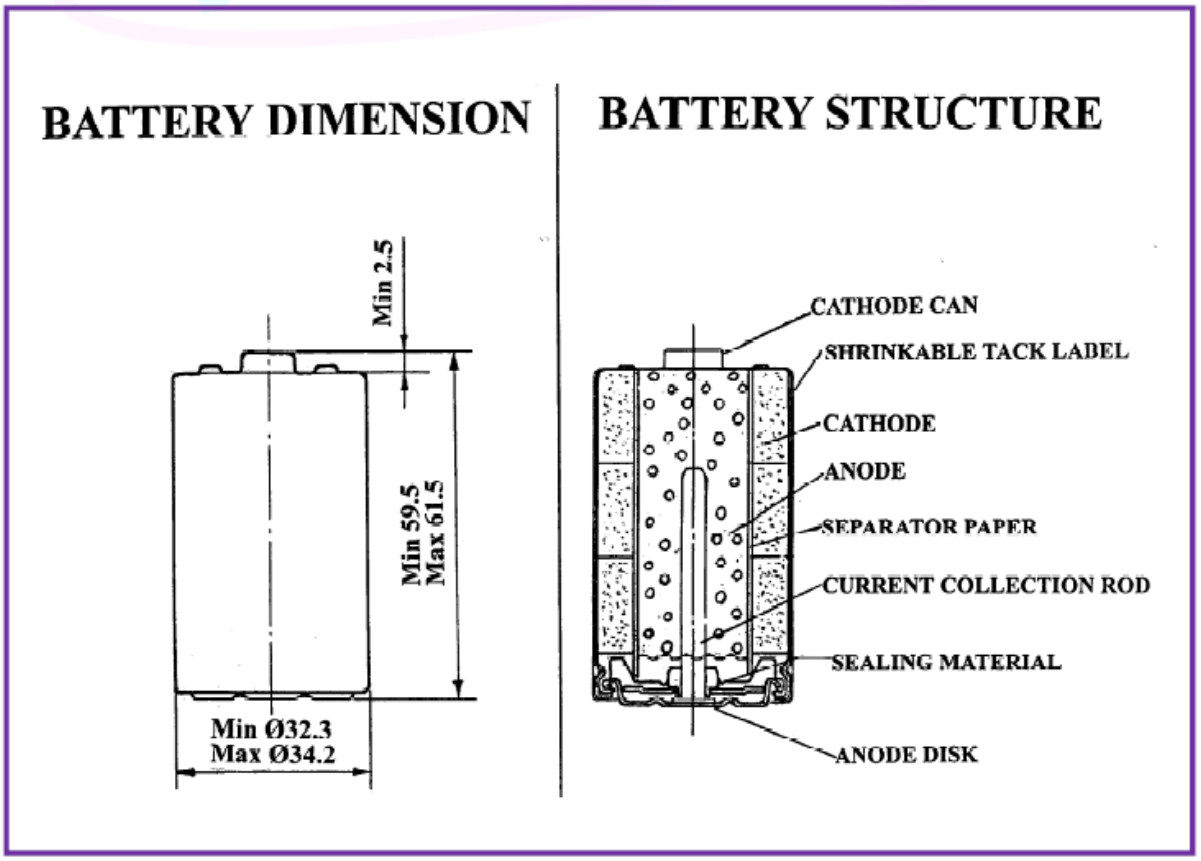
10. Marks

The following marks will be printed or stamped on the batteries's body:
(1)Model：LR20
(2)Registered Trademark：POWERCELL
(3)Nominal Voltage：1.5V
(4)Battery Poloidal：“+”and“-”
(5)Warning words：Do not recharge or dispose of in fire, battery may explode or leak.
(6)Manufactured Date or Exp date

11. Storage life

Under room temp and suitable environment, its shelf time is 10 years.

12. Battery Structure & Dimension



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