**1. Scope**

This specification is suitable for the performance of following batteries.

Model:LR03

Size:AAA

**2. Chemical structure**

Cathode - High density manganese dioxide

Anode - Zinc gel

Electrolyte - Potassium hydroxide

**3. Dimension**（**mm**）

 HeightＡ：43.3∽44.5

 Diameterф：9.5∽10.5

**4. Nominal voltage**：**1.5V**

**5. Storage characteristics**

The discharge capacity of battery will not less than 90% of original capacity after it stored for 12 months in a specific condition.

**6. Heavy Metals:**

Mercury.:less than 0.5PPM

Cadmium:less than 10PPM

**7. Electrical Characteristic**

(Condition: on-load resistance 3.9Ω,precision±0.5%,time:0.3S, temperature: 20℃±2℃°)

|  |  |  |  |
| --- | --- | --- | --- |
|  | On-loadVoltage (V) | Off-loadVoltage (V) | Instance current (A) |
| Fresh Battery | 1.62 above | 1.45 above | 5.5 above |
| Stored for 12 months under Room Temp | 1.60 above | 1.43 above | 4.0 above |

 **8**. **Discharge capacity** (20±2℃ , RH: 45%∽45%)

|  |  |  |
| --- | --- | --- |
| Load | 3.9 Ω | 10 Ω |
| Discharge pattern | 24h/d | 1h/d |
| End Volt | 0.9V | 0.9V |
| Discharge time | 160 min | 520 min |

**9**. **Characteristics**

Leakage test:

Test storage at high temperature&relative humidity:60+-2ºC

Test period:10 days

During the test period the battery not show leakage of liquids or internal materials.

Short Circuit Test:

Maximum temperature of the battery: 125ºC

Duration of the test.: 6 hours

Under normal conditions we produce a short circuit by connecting the two poles of the battery:no explode.

**10**. **Safety property**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Condition | Period | characteristic | Inspect standard |
| anti-short-circuit | Temp: 20℃±2℃ | 24hours | no explosion | N=9,Ac=0,Re=1 |

**11**. **Shelf life**：**5 years**

**12. Marks:**

The following message will be printed or stamped on the body of the battery:

(1) Model

(2) Manufacture’s name: SIMEANS

(3) Nominal Voltage

(4) Pole

(5) Warning