**1. Scope**

This specification is suitable for the performance of batteries supplied by Simeans battery.

Model: R03

Size:AAA

**2. Ratings**

|  |  |  |
| --- | --- | --- |
| Nominal Voltage | | 1.5 V |
| Temperature Range for operation | Standard Temperature | 20℃±2℃ |
| Special Temperature | 30℃±2℃ |
| High Temperature | 45℃±2℃ |
| Humidity Range for Storage | Standard Humidity | 45%∽75% |
| Special Humidity | 35%∽65% |
| Dimenstion | Diameter | 10.1∽10.2mm |
| Height | 44.3 mm |
| Approx weight | | 7.8∽8.1g |

**3. Electrical Characteristic**

(condition: on-load resistance 3.9Ω,precision±0.5%,time:0.3S, temperature: 20℃±2℃° Testing should be done within 30days upon the receipt of goods.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Off- load Voltage (V) | On-load Voltage (V) | Instance  current (A) | Test Standard |
| Fresh Battery | 1.68 | 1.30 | 2.5 | MIL-STD105  E, common second level, double sampling, AQ  L =1 |
| Stored for 3 months under 45℃ | 1.60 | 1.25 | 2.0 |
| Stored for 12 months under Room Temp | 1.60 | 1.30 | 2.0 |

**4. Discharge Characteristic**

(condition: temperature: 20℃±2℃. Testing should be done within 30days upon the receipt of goods)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Discharge condition | | | Minimum average Discharge time | | |
|  | On-load resistance | Discharge time per day | End voltage (V) | Fresh Battery | Stored for 3 months under 35℃ | Stored for 12 months under Room Temp |
| IEC/IEC standard | 3.9Ω | 24hour | 0.9V | 25min | 20min | 20min |
| Reference standard | 3.9 Ω | 24hour | 0.9V | 35min | 30min | 30min |
| 10 Ω | 24hour | 0.9V | 120min | 108min | 108min |

(Inspect standard: discharge 9 nos sample for each condition. It pass if average discharge time is equal to or more than minimum average value specified and the nos with discharge time less than 80% speclfied value is less than one.）

**5. Anti-leakage characteristic**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Condition | Period | characteristic | Inspect standard |
| Feature of over-discharge | On-load:  Temp: 20℃±2℃°  Huml: 65±20RH | Uninterrupted discharge for 4hours | Deformation is less than 0.2mm and no visual leakage | N=30,AC=0,  Re=1 |
| Feature of storage | Temp: 45℃±2℃  Huml: ≤70%RH | 30 days | N=30,AC=0,  Re=2 |
| Temp: 60℃±2℃  Huml: ≤90%RH | 15 days |

**6. Safety Characteristic**

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

**7. 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

**8. Store period of battery**

The battery is ok within 3 years under room temp and suit environment.