

PRODUCT SPECIFICATION

Longlife R03

REV. No.	REASON	CONTENTS	DATE	REMARK
0	Initial Release		2020-01-03	

Longlife R03

1. Designation:

R03 IEC: R03
 JIS: UM4
 ANSI: 24D
 Common: AAA

2. Chemical System:

Zinc Chloride-Zinc-Manganese Dioxide (Mercury Free)

3. Nominal Voltage: 1.5V

4. Nominal Weight: 7.0-8.0g

5. Hg Content: ≤1ppm

6. Battery capacity: 450mAh(75 Ω, 4h/d, 0.9V Cut Off, 20±2°C, (55±20)%R.H)

7. Storage Characteristics:

After 12 Months Storage, 90%Capacitance of Fresh Cells

After 24 Months Storage, 85% Capacitance of Fresh Cells

8. Electrical Characteristics:

(Test Environment: 20±2°C, (55±20)%R.H, Load Resistance:3.9ohms, Measure Time:0.3s)

	OCV(V)	CCV(V)	Short-circuit Current(A)
Initial	1.62-1.730	≥1.40	2.5
After 12 Months	≥1.58	≥1.35	2.0

9. Specifications (20±2°C, (55±20)%R.H)

Load	Discharge Mode	End Voltage	Initial	After 12 months storage	Application
5.1 Ω	4m/h,8h/d	0.9V	≥80min	≥68min	Portable lighting
10 Ω	1h/d	0.9V	≥170min	≥144min	Digital audio
75 Ω	4h/d	0.9V	≥26h	≥22h	Radio

24 Ω	15s/m,8h/d	1.0V	≥7h	≥6h	Remote control
5.1 Ω	1h/d	0.8V	≥1.3h	≥1.1h	Toy
100mA	1h/d	0.9V	≥3h	≥2.6h	Digital audio

10. Safety test

Test item	Test method	Test pcs	Requirements
Partial use	See IEC60086-5 6.2.2.1	5	No leakage No fire No explosion
Transportation shock	See IEC60086-5 6.2.2.2	5	No leakage No fire No explosion
Transportation vibration	See IEC60086-5 6.2.2.3	5	No leakage No fire No explosion
Climatic	See IEC60086-5 6.2.2.4	5	No fire No explosion
Incorrect installation	See IEC60086-5 6.3.2.1	20	No fire No explosion
External short circuit	See IEC60086-5 6.3.2.2	5	No fire No explosion
Over-discharge	See IEC60086-5 6.3.2.3	20	No fire No explosion
Free fall	See IEC60086-5 6.3.2.4	5	No fire No explosion

11. Expiry Period: 3 Years

12. Battery Dimension (Unit: mm)

/	min	max
Φ	9.8	10.5
A	43.5	44.5
C	4.3	--
F	--	3.8
G	0.8	--

