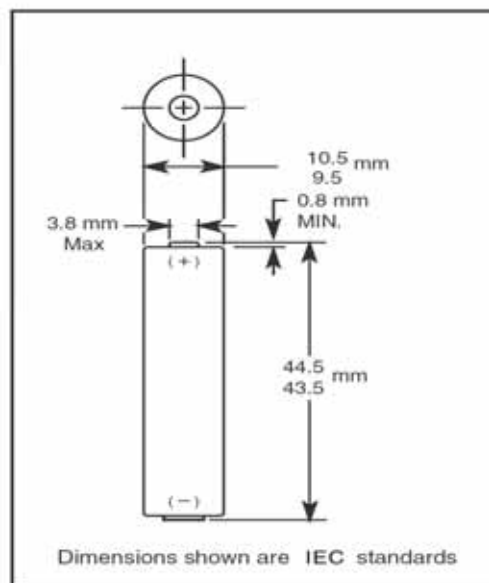


LR03 DIGI ALKALINE MANGANESE BATTERY SPECIFICATION

1. ESSENTIAL PARAMETER

Model	IEC LR03 ANSI AAA JIS AM-4
Electrochemical System	Zinc/ MnO ₂
Nominal Voltage	11.3 g
Nominal Voltage	1.5V
Working Temperature	-20 ~54
Shelf Life (20 °C)	3 years
Packaging and Mark	PET label (aluminum jacket) marked with expiry date
Hazardous Substance	Hg Content < 1ppm ; Cd Content < 20ppm ; Pb Content < 40ppm
Reference Standard	IEC-60086; GB8897 2006/66/EC.



2. ELECTRICAL CHARACTERISTICS (20Ω, 0.2s, 20±2 °C)

<i>I</i>	OCV (V) Open-circuit Voltage	CCV (V) Closed-circuit Voltage	SC (A) Short-circuit Current
Standard Value (Initially)	≥1.59	≥1.50	≥7.0

3. DISCHARGE PERFORMANCE (20±2 °C, RH: 45%~75%)

Discharge Pattern	Appliances (simulating)	End Voltage	Unit	Standard Value (Initially)	Actual Level (Initially)
5.1Ω - 4min/h, 8h/day	Portable lighting	0.9 V	minute	215	245
600mA - 10s/min, 1h/day	Photoflash	0.9 V	pulse	290	320
75Ω - 4h /day	Radio	0.9 V	hour	66	70
24Ω - 15 s/min, 8h/day	Remote controller	1.0 V	hour	18.8	19.5

10Ω - 1h/day	MP3	0.9 V	hour	7.8	8.0
--------------	-----	-------	------	-----	-----

4. SECURITY CHARACTERISTICS (Environment: Temp.20±2 , RH.60±15%)

No.	Test Item	Test Method	Sample QTY.	Specification Standard
1	Over discharge - Leakage-proof Test	20±2 , RH60±15%: 20Ω continuous discharge to 0.6V; visual observation.	9 pcs	No leakage
2	High Temperature - Leakage-proof Test	Store for 20 days under 60±2 and RH: 90±5%; then store for 4~24 hours under 20±2 and RH: 60±15%.	20 pcs	No leakage
3	External Short-Circuit	20±2 , RH60±15%: Keep the battery external short-circuit for 24hours under the specified conditions.	10 pcs	No explosion
4	Improper Installation	20±2 , RH60±15%: Keep four un-discharged batteries from the same batch series connected with one of them (the Test Battery) reversed.	5 groups	No explosion

5. USAGE GUIDE (Please refer to IEC60086.5 for detailed safety and storage specifications.)

- (1) Insert batteries correctly with regard to the polarities (“+”/“-”) marked on the battery and the electrical appliances;
- (2) Do not short-circuit, recharge, heat, disassemble the battery, or dispose of in fire;
- (3) Do not mix use old batteries with new ones, or mix use batteries of different types or brands;
- (4) Remove the exhausted battery from the appliances immediately;
- (5) Keep the batteries away from small children; do not let the child remove/ replace batteries without monitoring from adults.
- (6) Storage condition of the batteries shall be Temperature: 15 ~25 (no higher than 30), while extremely damp environment beyond RH: 40%~90% shall also be avoided; naked batteries are recommended to be labeled first, before storage.