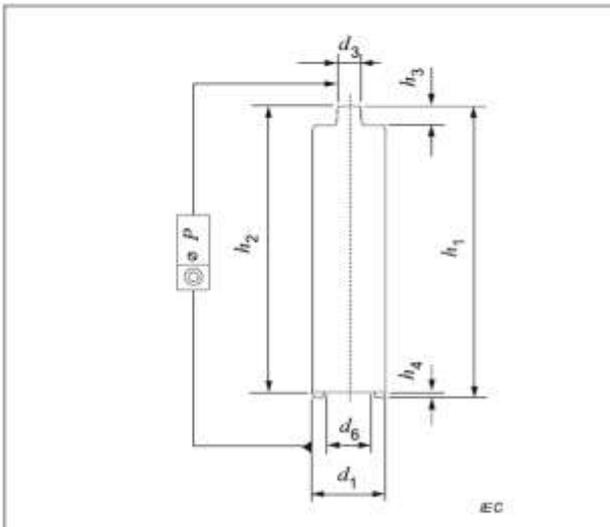


This document is provide to customers as reference information for basic awareness, storage and protection.



Battery details	
Brand	morbeit
Chemistry	Zn-Manganese dioxide
IEC Name	LR03
Size	AAA
Voltage	1.5 volt
Weight	11 gr
Dimensions	10.5 × 44.5 mm
Capacity	900 mAh
The thickness of the can	0.4 mm
Made by	Sam Arsh Parseh .Co
Country	IRAN

Materials	content	chemic al formula	Place of application	More information
Manganese dioxide	41% TW ↑	MnO ₂	Electrolyte	Corrosive / Causes eye irritation - Itchy - sensitizing
Zinc	42% TW ↑	Zn		
Mercury	0% TW	Hg		
Cadmium	0% TW	Cd		
Lead	0% TW	Pb		
Graphite	9% TW ↑	"C"		
Potassium hydroxide	5% TW ↑	KOH		
Steel	18% TW ↑	Fe+C	anode	Plate shape
Brass	81% TW ↑	Cu ₃ Zn ₂		rod shape
Steel	93% TW ↑	Fe+C	Cathode	Used in the form of cans



Dimensional drawing: LR03, FR10G445, R03

Dimensions in millimetres

Dimensions		LR03, FR10G445	R03
h_1	max.	44,5	44,5
h_2	min.	43,5	43,5
h_3	min.	0,8	0,8
h_4	max.	0,5	0,5
d_1	max.	10,5	10,5
	min.	9,8	9,8
d_3	max.	3,8	3,8
d_6	min.	4,3	4,3
$\varnothing P$	max.	0,25	0,4

Dimensions shown are IEC standards
 IEC: International Electrotechnical Commission

This data is subject to change. Performance information is typical. Contact SAM ARSH PARSEH company for the latest information.

Constant resistance test (AAA battery)

IEC designation: LR03

OCV.max(V): 1.68 V

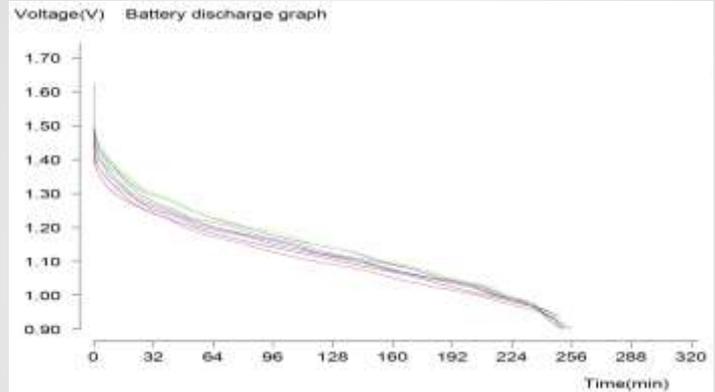
V_n(V): 1.5 V

EV(V): 0.9 V

MAD_{Standard} Minutes: 130 ‘

Load: 5.1 Ω

MAD Samarshparseh production: 249’AVG↑



Number of batteries under test: 9

IEC . Standard :60086-1&2

Constant resistance test (AAA battery)

IEC designation: LR03

OCV.max(V): 1.68 V

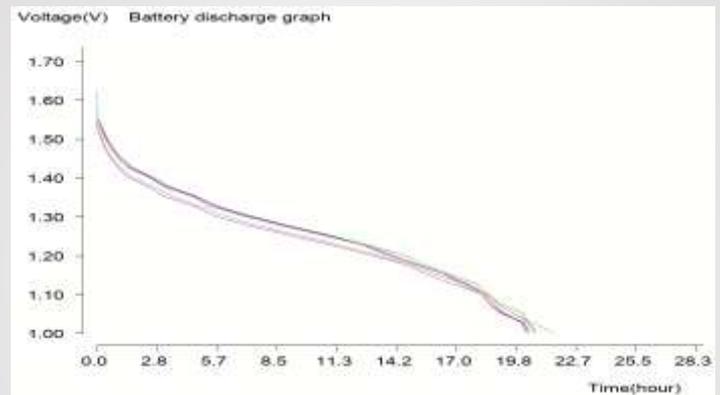
V_n(V): 1.5 V

EV(V): 1.0 V

MAD_{Standard} Hour: 14.5 Hours

Load: 24 Ω

MAD Samarshparseh production: 21AVG↑ Hours



Number of batteries under test: 9

IEC . Standard :60086-1&2

OCV.max : Maximum open-circuit voltage

V_n : Nominal voltage

IEC : INTERNATIONAL ELECTROTECHNICAL COMMISSION

EV : end-point voltage

MAD : minimum average duration

This data is subject to change. Performance information is typical. Contact SAM ARSH PARSEH company for the latest information.

- Handling and storage
 - I. When packing the batteries, do not allow battery terminals to contact each other, or contact with other materials. Be sure to packed batteries by providing partition in the packaging box, or in a separate plastic bag so that the single batteries are not mixed together.
 - II. Use strong material for packing boxes so that they will not damage by vibration, impact, dropping and stacking during their transportation.
 - III. Do not short circuit, recharge, deform, throw into fire or disassemble.
 - IV. Do not mix different type of batteries.
 - V. Do not solder directly onto batteries.
 - VI. Insert the battery correctly in electrical equipment.
 - VII. Do not let water penetrate into packaging boxes during their storage and transportation.
 - VIII. Do not store the battery in places of the high temperature or under direct sunlight.
 - IX. Please also avoid the places of high humidity. Be sure not to expose the battery to condensation, rain or freezing conditions.

- Protective exposure - in case of electrolyte leakage from the battery
 - I. Respiratory Protection: For most conditions there is no respiratory protection.
 - II. Hand Protection: Safety gloves, or do not touch.
 - III. Eye Protection: Safety glasses must be worn, In case of contact with eyes, rinse immediately with plenty cold of water.
 - IV. Skin Protection: In case of contact with skin, rinse with plenty cold of water.

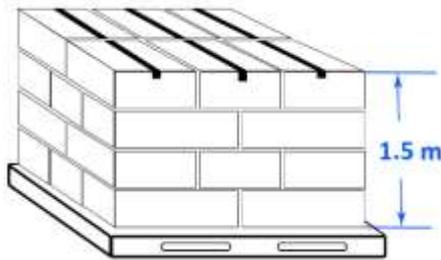
This data is subject to change. Performance information is typical. Contact SAM ARSH PARSEH company for the latest information.

ATTENTION:

The height to which batteries may be stacked is clearly dependent on the strength of the pack. As a general guide, this height should not exceed 1,5 m for cardboard packs or 3 m for wooden cases.

batteries shall be stowed away from ship engines and not left for long periods in unventilated metal box cars (containers) during summer.

Although the storage life of batteries at room temperature is good, storage is improved at lower Temperatures (e.g. in cold rooms $-10\text{ }^{\circ}\text{C}$ to $+10\text{ }^{\circ}\text{C}$ or in deep-freeze conditions below $-10\text{ }^{\circ}\text{C}$), provided special precautions are taken. The batteries shall be enclosed in special protective packaging (such as sealed plastic bags or variants) which should be retained to protect them from condensation during the time they are warming to ambient temperature. Accelerated warming is detrimental. Batteries which have been cold-stored should be put into use as soon as possible after return to ambient temperature.



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