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Datasheet

Alkaline AA Battery

RS Stock number [789-2828](#)



Reference Standards:

National standards of People's Republic of China:

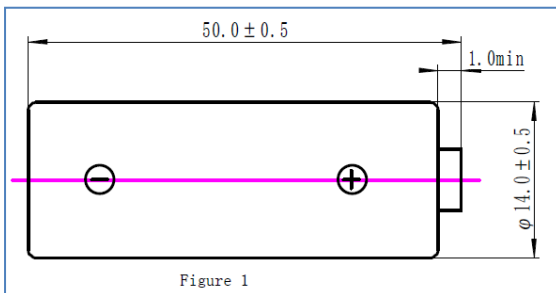
GB/T 8897.1-2003 《Primary batteries-part 1:General》 (IDT IEC60086-1: 2001) ;

GB8897.2-2005 《Primary batteries-part 2: Physical and technologic specifications》
(MOD IEC60086-2: 2001) ;

GB8897.5 《Primary batteries-part 5: Safety of batteries with aqueous electrolyte》 (IDT IEC60086-5)

Mechanical Requirements:

Physical:



Weight: 24 ± 1 g

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Electrical Requirements:

Nominal Voltage: 1.5 V

Open-circuit voltage: Min – 1.50 V, Max – 1.65 V

Cell Service Life:

Table 1

Application	Power Load	Cycle Time	Cut off Voltage	Minimum Average Duration			
				Initial	After 12 months storage	After 36 months storage	Unit
Radio	43Ω	4h/d	0.9	90	82.8	76.5	H
Recorder	10Ω	1h/d	0.9	18.5	17	15.7	H
Toys	3.9Ω	1h/d	0.8	7	6.4	6	H
Remote controller	24Ω	15s/m, 8h/d	1	45	41.4	38.2	H
-----	10Ω	24h/d	0.9	19	17.5	16.2	H
Portable lighting	1000mA	10s/n, 1h/d	0.9	300	276	255	Pulses
-----	1000mA	24h/d	1	25	23	21	Min
Electronic games, compact discs, & mini discs	2500mA	1h/d	0.9	6.5	6	5.5	H
Digital camera	1.5W-2s/ 0.65W-28s	5m/1h, 24h/d	1.05	50	46	42	Pulses

Unless otherwise stated, all measurements are to be performed at a Standard Environment of $20 \pm 2^{\circ}\text{C}$, $60 \pm 15\%\text{R.H.}$

Safety of Batteries:

Table 2

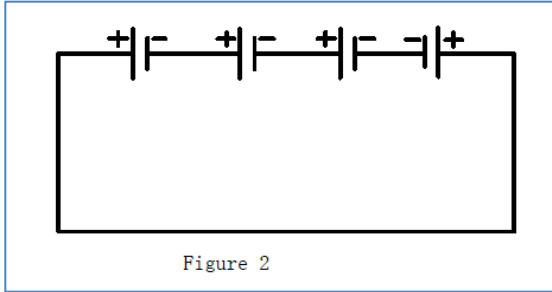
Test		Misuse Simulation	Requirements
Electrical	D	Incorrect installation	No explosion (NE)
	E	External short circuit	No explosion (NE)
	F	Over discharge	No leakage and distortion
Temperature	G	High temperature store	No leakage

Test D – Incorrect Installation:

Procedure (5 groups) – Four undischarged batteries of the same brand, type and origin shall be connected in series

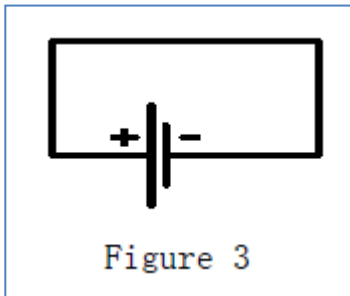
with one reversed as shown in the diagram below. The circuit shall be connected for 24 hours or until the battery case temperature has returned to ambient temperature. The resistance of the inter-connecting circuitry shall not exceed 0.1 Ω.

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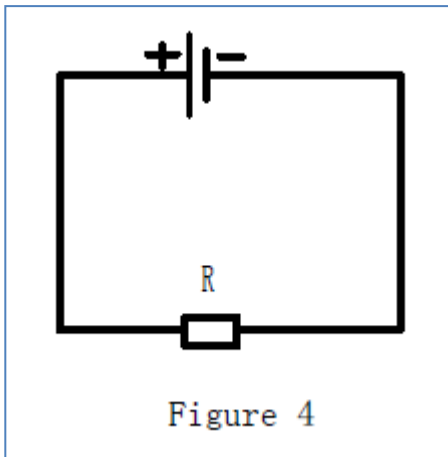
Test E – External Short Circuit:

Procedure (5 groups) – An undischarged battery shall be connected as shown below. The circuit shall be connected for 24 hours or until the battery case has returned to ambient temperature. The resistance of the inter-connecting circuit shall not exceed 0.1Ω .



Test F – Overdischarge:

Procedure (5 groups) – After having finished discharging under the stated condition, continue discharge, until the on-load voltage falls to 40% of the nominal voltage.





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Test G – High Temperature

Procedure – Batteries stored in the condition of 60°C, 90%±5% R.H. for 20 days. See table 2 for requirements.

Heavy Metal Contents:

Mercury Limit (per battery weight): 1 ppm

Cadmium Limit (per battery weight): 2 ppm

Lead Limit (per battery weight): 15 ppm

Specifications:

Chemistry: Alkaline

Size: AA

Terminal Type: Standard