

**ENGINEERING SPECIFICATION**

**Product:** R6P, Zn/MnO<sub>2</sub>,1.5Volts

**Date:** March 9, 2005

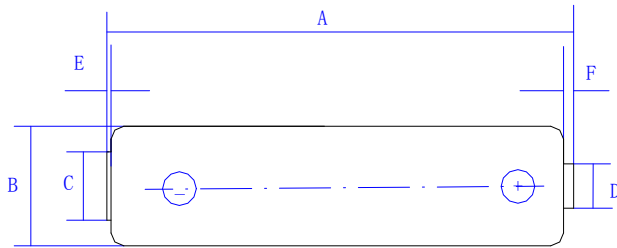
**SCOPE :**

This specification defines the technical requirements for dry cells distributed by BAO TONG. If not otherwise specified, the cells should meet or exceed the requirements of **IEC 60086-1,2**

If not otherwise specified in the drawing, the cell shall meet the dimensional requirements of standards listed in the scope.

**1. Dimensions**

in accordance with attached drawing.



Dimensions	max	min
A	50.5	49.2
B	14.5	13.5
C	--	7.0
D	5.5	--
E	0.5	--
F	--	1.0

**2. Electrical Requirement**

O.C.V. Min:1.560V,

Max:1.725V

C.C.V. ≥ 1.450V

After 0.2sec±0.01sec by R=5.0Ω

**3. Service Life:**

3.1

Load Resistance ( ±0.5%)	<b>3.9 Ohms</b>			
Cycle Time	<b>24h/d</b>			
Cutoff Voltage	<b>0.9Volt</b>			
Storage Condition	<b>+20°C±2°C and 60±10%RH</b>			
Minimum Average Duration	<30days	12 months	24months	36months
	90 mins	76 mins	72 mins	

3.2

Load Resistance ( ±0.5%)	<b>1.8 Ohms</b>			
Cycle Time	<b>15s/min 24h/d</b>			
Cutoff Voltage	<b>0.9Volt</b>			
Storage Condition	<b>+20°C±2°C and 60±10%RH</b>			
Minimum Average Duration	<30days	12 months	24months	36months
	160 cycles	136cycles	108 cycles	

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**3.3**

Load Resistance ( ±0.5%)	3.9 Ohms			
Cycle Time	1h/d			
Cutoff Voltage	0.9Volt			
Storage Condition	+20°C±2°C and 60±10%RH			
Minimum Average Duration	<30days	12 months	24months	36months
	2.3hours	2hours	1.8hours	

**3.4**

Load Resistance ( ±0.5%)	43 Ohms			
Cycle Time	4h/d			
Cutoff Voltage	0.9Volt			
Storage Condition	+20°C±2°C and 60±10%RH			
Minimum Average Duration	<30days	12 months	24months	36months
	28hours	24hours	22hours	

**3.5**

Load Resistance ( ±0.5%)	10 Ohms			
Cycle Time	1h/d			
Cutoff Voltage	0.9Volt			
Storage Condition	+20°C±2°C and 60±10%RH			
Minimum Average Duration	<30days	12 months	24months	36months
	6hours	5hours	4.8hours	

**4. Leakage Resistance**

**4.1 High heat and humidity storage test**

High Temperature Exposure

When exposed to a temperature of 45 ±2°C  
for a period of

**20 days**

no leakage shall occur during the test

**5. Safety Requirement**

**5.1 Short Circuit Test**

When a continuous short circuit is applied to the cell terminals at Standard Environment, the case temperature must not exceed the specified limit and no explosion may occur.- Leakage is tolerable

**5.2 Safety Vent Test**

When 4 cells are connected in series with a load resistor and one of the 4 cells is connected with reverse polarity no explosion may occur. - The safety valve must operate

Test Duration

**24 hours**

**5.3 Forced Over Discharge Test**

When one drained cell is connected in series with 3 fresh cells

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and a load resistor, no explosion may occur. - Leakage is tolerable.  
The drained cell is prepared by discharging a fresh cell  
through a 3.9 Ohm resistor until its CCV reaches 0.9 V

Test Duration

**3 days**

### 6. Heavy Metal Contents

The heavy metal contents of the cell shall conform to  
Mercury limit (per cell weight)  
Cadmium limit (per cell weight)

1 ppm max  
100ppm max