SPECIFICATION

1. Cross Reference :

IEC	JAPAN	Ray-O-Vac	U.S.A SWITZERLAND	GERMANY	H.K PRODUCTS
L1154	LR44	RW32	303	V303	AG13

2. Chemical System : Zinc-Manganese Dioxide (Potassium Hydroxide Electrolyte)

3. Nominal Voltage : 1.50V

4. Standard Capacity : 145mAh (continuously discharge at 20±2℃ under 6.8kΩ load to 0.9V end-point voltage)

5. Approximate Weight : 1.95g

6. Dimensions & Structure : Dimensions & structure of the cell are shown in the attached Fig. 1.

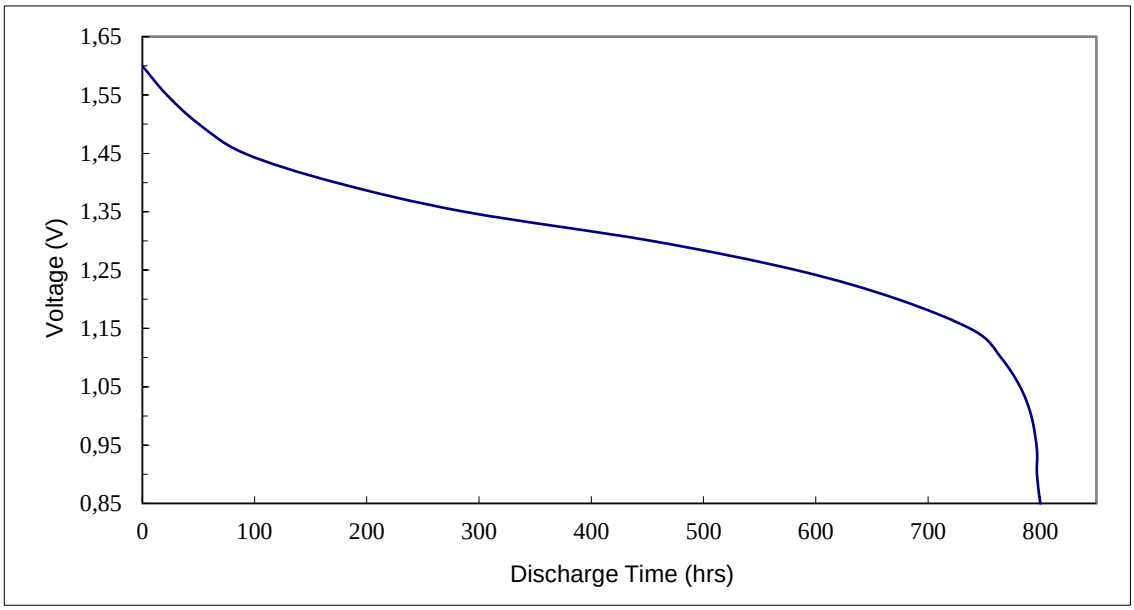
7. Terminal Materials : Negative : Ni plated/Fe/Cu plated or gold plated steel
Positive : Ni plated steel

8. Characteristics : Characteristics of the cell are shown in the following table.

Items	Storage	Characteristics	Conditions
8.1 Electric Characteristics			
Open-Circuit Voltage	Initial	1.530V or higher	DC Voltmeter : The tolerance is ±0.005V and the input resistance is 1MΩ or more.
	After 12 months	1.500V or higher	
Closed-Circuit Voltage	Initial	1.520V or higher	DC Voltmeter : Same as above. Load Resistance : 6.8kΩ, 0.8Sec.
	After 12 months	1.490V or higher	
8.2 Service Output			
Service Life 6.8kΩ Continuous Discharge	Initial	800hrs or longer	Discharge Resistance : 6.8kΩ End-Point Voltage : 0.9V
	After 12 months	720hrs or longer	
8.3 Electrolyte Leakage Proof Characteristics			
Electrolyte leakage on overdischarge	There are no bulging or deformation of cells in excess of maximum dimensions shown in attached Fig. 1 by 0.2mm or more. There are no visible electrolyte leakage.		Temperature : 20±2℃ Humidity : (65±20)%RH Load Resistance : 6.8kΩ Overdischarge Time : 48hrs (discharge after having reached specified end-point voltage)

9. Discharge Curve :

Load Resistance : 6.8kΩ End-Point Voltage: 0.9V



10. Markings on Product :

(1) Battery Type : AG13

(2) Polarity : "+" at the bottom ("--" not indicated)

(3) Other specified markings

11. Caution for Use :

(1) Since the button cell is not manufactured for recharging, there are risks of electrolyte leakage or causing damage to the device if the cell is charged.

(2) The button cell shall be installed with its "+" and "--" sign according to the instruction shown on the applied device.

(3) Short-circuiting, heating, disposing of in fire, or dissembling the button cell shall be prohibited.

12. Warranty : 12 months shelf life after delivery.