

# **PRODUCTSPECIFICATIONS**

## **Zinc Chloride Dry Battery**

**4R25C-2-ELL**

**(Mercury & Cadmium Free)**

DUREDAY BATTERY

**1. Scope**

This specification defines the technical requirements for 4R25-2C heavy duty battery.

Cross References: ATC IEC  
4R25-2G 4R25-2

**2. Purpose**

To assure that any 4R25-2C battery manufactured or procured by dureday will meet or exceed our customers expectations.

**3. Reference Document**

IEC 60086-1:2000 *··Primary Batteries-Part1:General*  
IEC 60086-2:2000 *··Primary Batteries-Part2:Physical and Electrical Specification*

**4. Chemical System**

Zinc-Manganese Dioxide (Ammonium Chloride-Zinc Chloride Electrolyte)

Mercury: Less than 1 ppm

**5. Nominal Voltage:** 6.0volt

**6. Average Weight:** 1100g

**7. Jacket:** Plastic box

**8. Nominal Capacity**

5400mah (Conditions: 8.2 Ω continuously discharge at 20±2°C, end point voltage 3.60v)

**9. Electrical Characteristics**

	Off-load Voltage (v)	On-load Voltage (v)	Short circuit current	Acceptance Standard
Initial within 30 day	6.50	5.80	16	GB2828.1-2003 commonly I sampling AQL=0.4
After 12 months	6.30	5.60	12	

conditions: 8.2 Ω ±0.5% load resistance, measuring time 0.3 seconds, temperature at 20±2°C, The hairspring type ampere meter with ±0.5% accuracy (0.5level) shall be used.

**10. Service Time**(condition: test temp. 20±2°C, tested within 30 day after delivery)

Discharge Condition			IEC Standard	Average Minimum Discharge Time	
Discharge load	Daily discharge time	End Point Voltage (v)		Initial within 30 day	After 12mth at 20±2°C
110Ω	12h	3.6	200h	265h	240h
8.2Ω	30min	3.6	900min	1250min	1125min
9.1Ω	30m/h,8h/d	3.6	696min	1000min	900min
8.2Ω	24h	3.6	/	600min	/

Satisfaction standard: 9 pieces of battery will be tested for each discharging standard... The result of the average discharging time from each discharging standard shall be equal to or more than the average minimum time requirement.

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**11. Leakage & Deform**

Discharge batteries till it meet the end points for capacity data. Keep on discharging at the same resistance and condition till batteries meet 40% lower than discharge end point. Batteries should not found any leakage or deform by eye checking.

**12. Caution for Use**

- (1) Since the battery is not manufactured for recharging, there are risks of electrolyte leakage or causing damage to the device if the battery is charged.
- (2) The battery shall be installed with its “+” and “-” in correct position.
- (3) Short-circuiting, heating, disposing of into fire and disassembling the battery are prohibited.
- (4) Avoid using old and new batteries together.

**13. Shelf Life**

2 year after delivery under proper storage condition.

**14. Discharge Curves**

- a.  $8.2 \Omega$  -24h/d  $8.2 \Omega$  -30m/d ( **Page 4**)
- b.  $9.1 \Omega$  -30m/h-8h/d  $110 \Omega$  -12h/d ( **Page 5**)

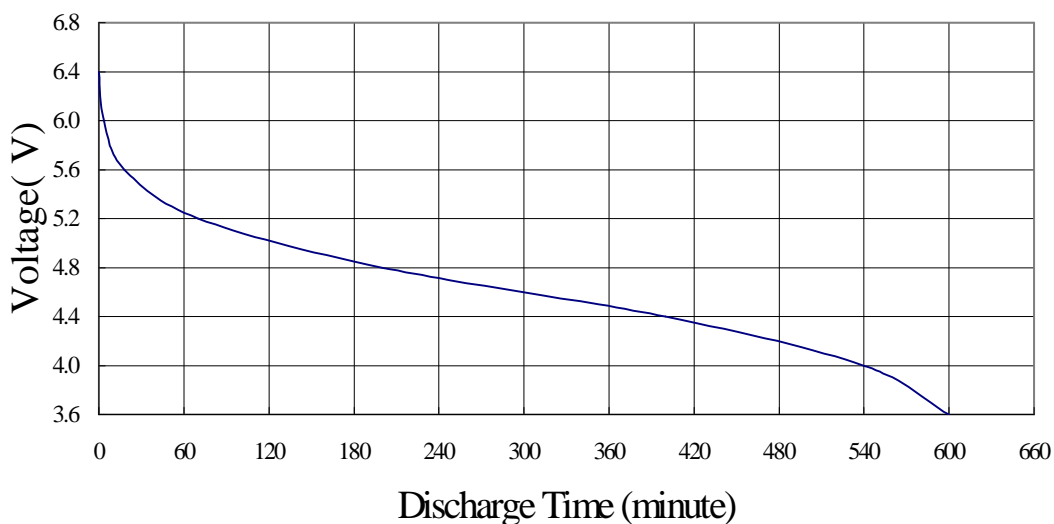
**15. Expiry Period Marking:**

- a. Production date and shelf life 2 years marked on the finished cell.
- b. For private, can mark according to customer's requirements.

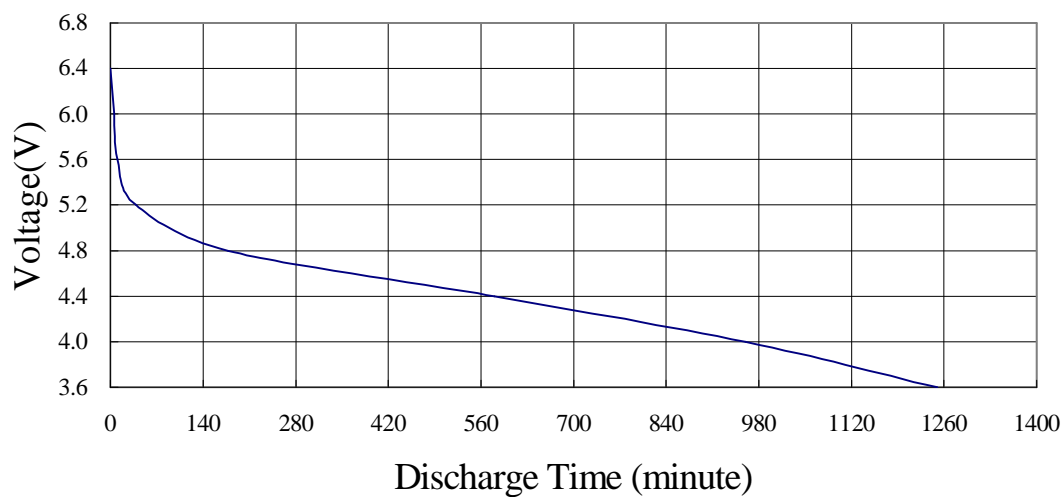
**16. Battery Dimension Page 6**

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### 8.2Ω Continuous Discharge Curve

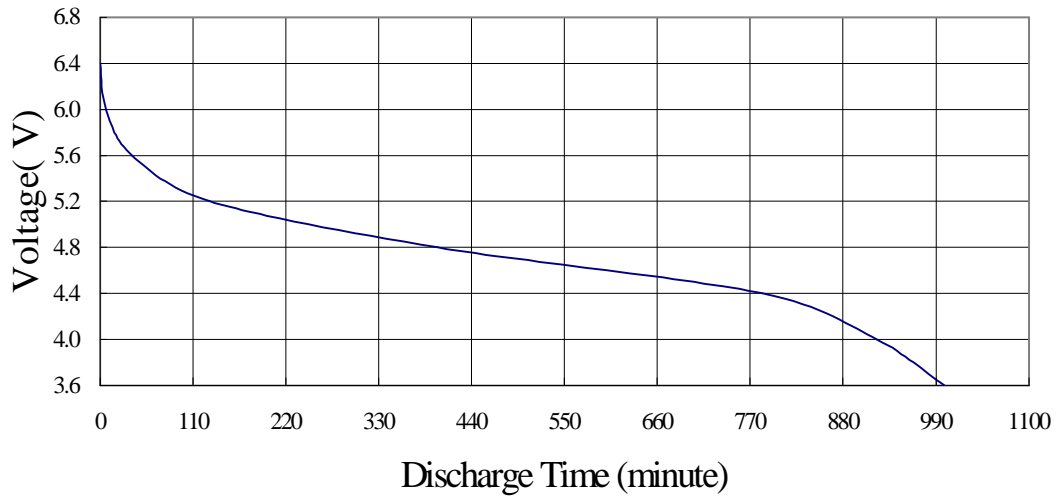


### 8.2Ω 30m/d Discharge Curve

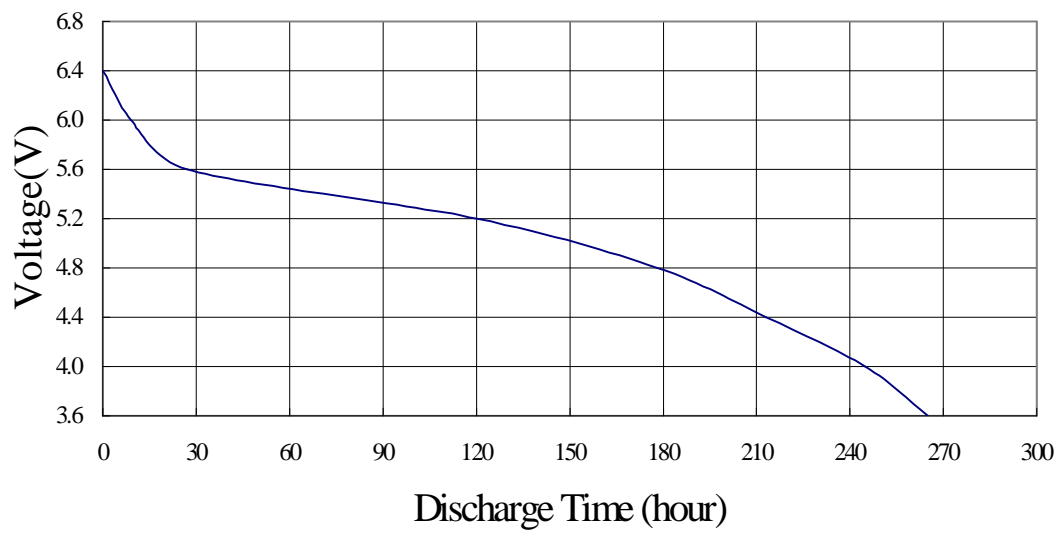


DUREDAY BATTERY

9.1 Ω 30m/h-8h/d Discharge Curve

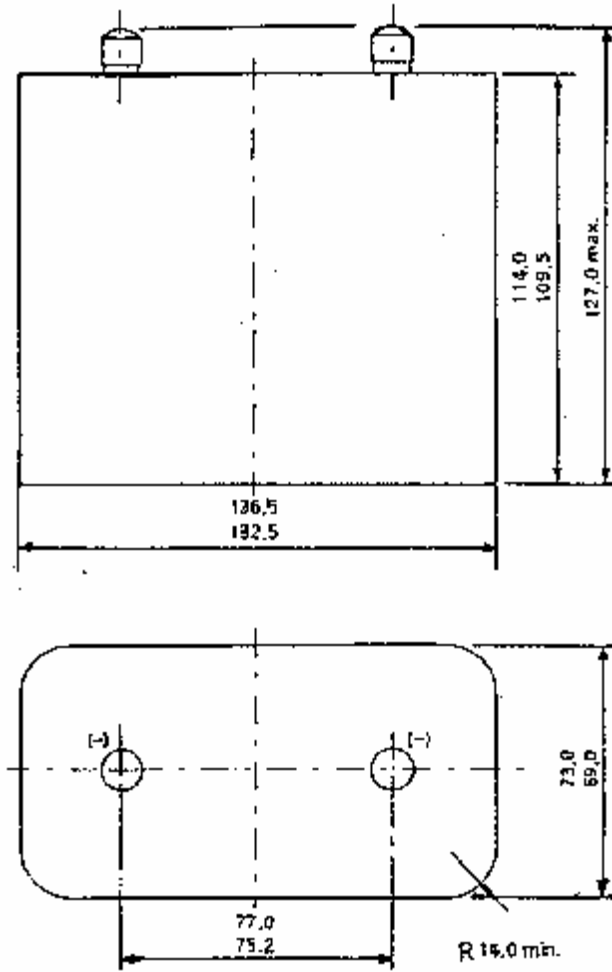


110 Ω 12h/d Discharge Curve



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### Battery Dimension(mm)



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