

PRODUCT SPECIFICATION

PART NO. CEDC056136M
Customer _____
Customer P/N _____
Issue Date 2021.9 _____

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|------------------|----------|--|
| Checked | Prepared | |
| | | |
| Customer Approve | | |
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1 Application SCOPE:

This specification which specifies the performance and test methods of super capacitors, is treated as the basis of the technology confirmation.

2 General Specification:

2.1 Application scope

The products using as a back-up source can be applied in the field of electronic devices such as RAM, intelligent instrument, motor drive, clock circuit and toys,

2.2 Standard test situation

Generally speaking, test should be done at a condition of standard atmospheric press, 5~35°C temperature and a relative humidity of less than 85%; the test situation adopted by this specification is standard atmospheric, 25°C and relative humidity less than 60%.

2.3 The adopted standard :

IEC 62391-1 《Fixed electric double-layer capacitors for use in electronic equipment – Part 1:Generic specification》 Q/KMNY001-2009 “Electrochemical capacitor”

3 Product Structure

The product, using electrolyte and separator to separate the electrodes that made by activated carbon and sealed the Aluminum case by rubber plug is base on the principal of electric double layer capacitors. The leads are at the same side of the products

4 General Specification

| Item | | Specification/Condition |
|------|--|---------------------------|
| 01 | Part No. | CEDC056136M |
| 02 | Rate capacitance (F 25°C $\Delta V=0.8U-0.4U$ I=1A) | 136F |
| 03 | Capacitance tolerance | 0 ~ +30% |
| 04 | (V) Rated Voltage | 0-56 |
| 05 | (V) Absolute Maximum Voltage | 59 |
| 06 | (A) Max Continued Current | 52 |
| 07 | Maximum Peak Current, 1 second (non repetitive) | 120 |
| 08 | Operating temperature range | -40°C ~ +65°C |
| 09 | Balancing voltage type | Balancing voltage circuit |
| 10 | ESR(mΩ 1000Hz) | 20 |
| 11 | Shell packing | Metal |
| 12 | Output type | Terminal |

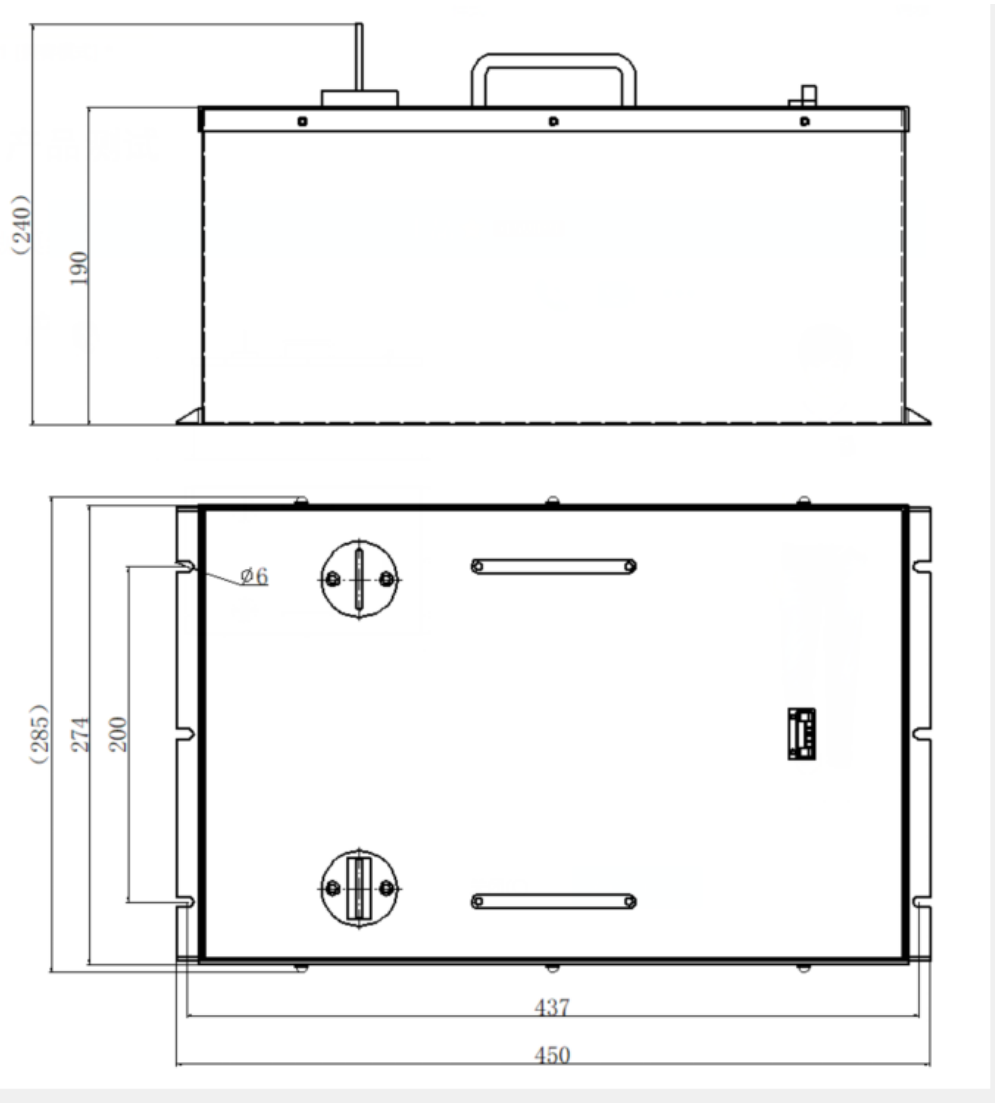
5 Environmental index

| Item | | Specification/Condition |
|------|-------------------------------|--|
| 01 | Temperature characteristics | When +65°C $\Delta C/C$ $\leq 30\%$, ESR \leq specified value (25°C) When -40°C $\Delta C/C$ $\leq 50\%$, ESR ≤ 4 times of initial value (25°C) |
| 02 | High temperature load | +65°C with rated voltage, after 1000 hours, $\Delta C/C$ $\leq 30\%$ ESR ≤ 4 times of specified value |
| 03 | High temperature without load | +65°C, after 1000 \pm 4 hours, $\Delta C/C$ $\leq 30\%$, ESR ≤ 2 times of specified value |
| 04 | Cycle life Expectancy | Under the rated voltage, 500,000 cycles of charge and discharge experiments at room temperature. $-\Delta C/C-\leq 30\%$, ESR ≤ 4 times initial value (25 ° C) |

6 MARK

Capacitance ; Voltage ; Jinpei brand

7 product dimension



| | |
|--|--|
| Size (mm) ($\pm 2\text{mm}$) (L*W*H) | 450*285*250 |
| Output type | Terminal |
| describe | Positive electrode: red Negative electrode: black |
| Alarm description | 1、OV+ 2、OV- 3、OT1 4、OT2 |

Product dimensions are for reference only, and dimensions and specifications may change without notice. If there are key technologies in application For specification requirements, please contact our company's technical department.

8 Matters Needing Attention

- (1) Supercapacitors should be used at nominal voltage
- (2) The super capacitor has polarity and is used according to the specified polarity.
- (3) Ambient temperature affects the life of supercapacitors
- (4) There is a voltage drop $\Delta V=IR$ at the moment of discharge
- (5) It should be stored in an environment where the temperature is $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ and the relative humidity is less than 60%.
- (6) Do not store in places with relative humidity greater than 85% or containing toxic gases
- (7) Supercapacitors should not be used in high frequency charging and discharging circuits
- (8) When supercapacitors are used in series, there is a voltage balance problem between cells
- (9) For other problems, please consult the manufacturer or refer to the relevant technical information of the supercapacitor instructions.