



Screw Terminal Type, High Energy Density Type

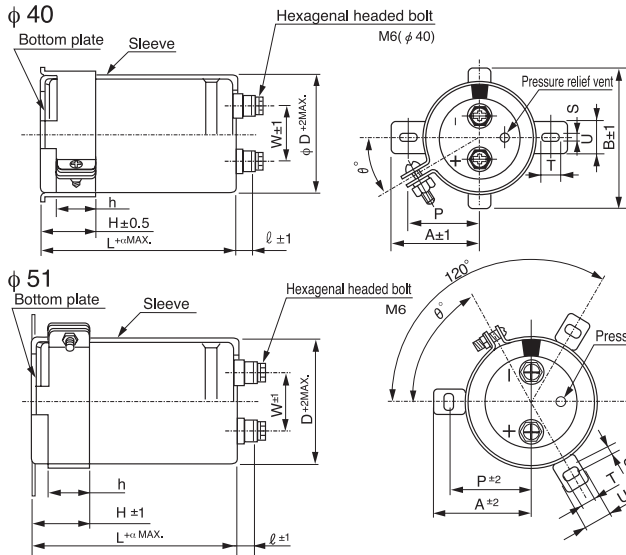
- High energy density.
- Suitable for electric power storage.
- Compliant to the RoHS directive (2011/65/EU).



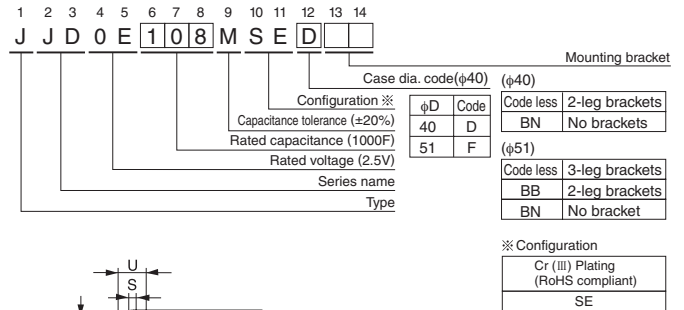
## Specifications

| Item                       | Performance Characteristics   |   |                    |  |     |   |
|----------------------------|---|---|--------------------|--|-----|---|
| Category Temperature Range | - 25 to +60°C   |   |                    |  |     |   |
| Rated Voltage Range        | 2.5V  |   |                    |  |     |   |
| Rated Capacitance Range    | 1000 to 2500F See Note  |   |                    |  |     |   |
| Capacitance Tolerance      | ±20% , 20°C   |   |                    |  |     |   |
| Stability at Temperature   | Capacitance (- 25°C) / Capacitance (+20°C) ×100 ≥ 70% DCR (- 25°C) / DCR(+20°C) ≤ 7   |   |                    |  |     |   |
| DCR*                       | Refer to the table below (20°C). *DC internal resistance  |   |                    |  |     |   |
| Endurance                  | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 60°C.         | <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>DCR</td> <td>300% or less than the initial specified value</td> </tr> </table> | Capacitance change | Within ±30% of the initial capacitance value | DCR | 300% or less than the initial specified value |
|                            | Capacitance change  | Within ±30% of the initial capacitance value  |                    |  |     |   |
| DCR                        | 300% or less than the initial specified value   |   |                    |  |     |   |
| Shelf Life                 | The specifications listed at right shall be met when the capacitors are restored to 20°C after storing the capacitors under no load for 2000 hours at 60°C. | <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>DCR</td> <td>300% or less than the initial specified value</td> </tr> </table> | Capacitance change | Within ±30% of the initial capacitance value | DCR | 300% or less than the initial specified value |
|                            | Capacitance change  | Within ±30% of the initial capacitance value  |                    |  |     |   |
| DCR                        | 300% or less than the initial specified value   |   |                    |  |     |   |
| Humidity Endurance         | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 500 hours at 40°C 90%RH.    | <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>DCR</td> <td>300% or less than the initial specified value</td> </tr> </table> | Capacitance change | Within ±30% of the initial capacitance value | DCR | 300% or less than the initial specified value |
|                            | Capacitance change  | Within ±30% of the initial capacitance value  |                    |  |     |   |
| DCR                        | 300% or less than the initial specified value   |   |                    |  |     |   |
| Marking                    | Printed with white color letter on black sleeve.  |   |                    |  |     |   |

## Drawing



## Type numbering system (Example : 2.5V 1000F)



Note :  
 The capacitance calculated from discharge time ( $\Delta T$ ) with constant current ( $i$ ) after 30minute charge with rated voltage (2.5V).  
 The discharge current ( $i$ ) is 0.01 × rated capacitance (F).  
 The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.  
 The capacitance calculated below.  
 Capacitance (F) =  $i \times \Delta T$

## Dimensions

| Rated Voltage (Code) | Cap. (F) | Cap. code | DCR* Typical (mΩ) | Case size |        | Ref. Weight (g) |
|----------------------|----------|-----------|-------------------|-----------|--------|-----------------|
|                      |          |           |                   | φ (mm)    | L (mm) |                 |
| 2.5V (0E)            | 1000     | 108       | 8.0               | 40        | 105    | 210             |
|                      | 1300     | 138       | 6.0               |           | 135    | 250             |
|                      | 2300     | 238       | 4.0               | 51        | 135    | 450             |
|                      | 2500     | 258       | 3.5               |           | 142    | 500             |

\* The listed DCR value is typical and therefore not a guaranteed value.

- Dimensions of terminal pitch(W) and length(ℓ) and Normal dia. of bolt (mm)

| φD | W    | ℓ  | α | Nominal of bolt |
|----|------|----|---|-----------------|
| 40 | 18.8 | 9  | 3 | M6              |
| 51 | 26.0 | 10 | 3 | M6              |

## Dimensions of mounting bracket (mm)

| Symbol | Leg shape φD | 3-Legs |     | 2-Legs |    |
|--------|--------------|--------|-----|--------|----|
|        |              | 51     | 40  | 51     | 40 |
| P      |              | 32.5   | 27  | 33.2   |    |
| A      |              | 38.5   | 32  | 40     |    |
| B      |              | -      | 48  | -      |    |
| T      |              | 7.5    | 7.0 | 6.0    |    |
| S      |              | 5.0    | 3.5 | 4.5    |    |
| U      |              | 12     | 10  | 14     |    |
| θ°     |              | 60     | 45  | 30     |    |
| H      |              | 20     | 17  | 25     |    |
| h      |              | 15     | 12  | 15     |    |

Note) The brackets will be supplied in the separate box.