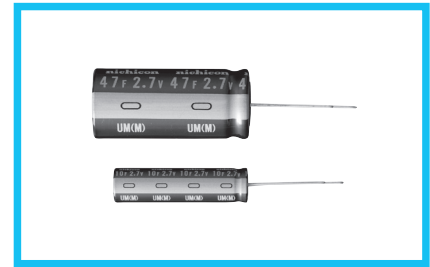
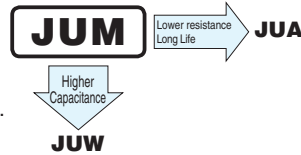


**JUM**

Radial Lead Type, Standard

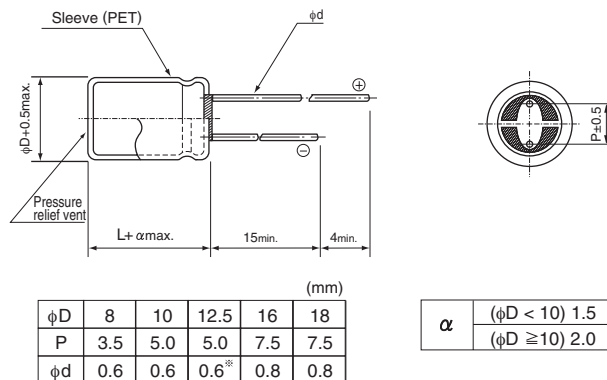
- Standard type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (– 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



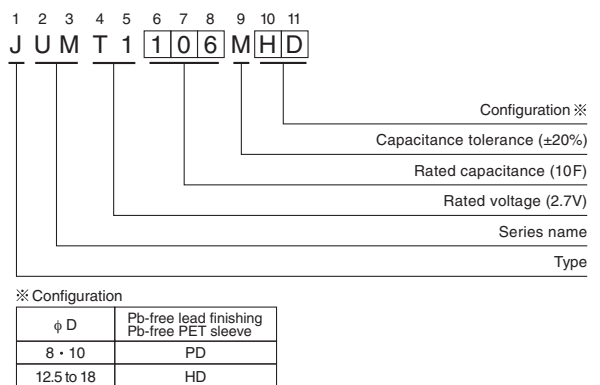
## Specifications

| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | − 25 to +70°C   |                    |   |
| Rated Voltage Range          | 2.7V  |                    |   |
| Rated Capacitance Range      | 1 to 47F See Note   |                    |   |
| Capacitance Tolerance        | ±20% , 20°C   |                    |   |
| Stability at Low Temperature | Capacitance (− 25°C) / Capacitance (+20°C) ×100 ≥ 70% ESR (− 25°C) / ESR (+20°C) ≤ 4  |                    |   |
| ESR, 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 1000 hours at 70°C.         | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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.    | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 300% or less than the initial specified value |
| Marking                      | Printed with white color letter on black sleeve.  |                    |   |

## Drawing



## Type numbering system (Example : 2.7V 10F)



- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Dimensions

| Rated Voltage<br>( Code ) | Rated Capacitance<br>(F) | Code | ESR<br>(Ω)<br>(at 1kHz) | DCR※<br>Typical (Ω) | Case size<br>φ D × L (mm) |
|---------------------------|--------------------------|------|-------------------------|---------------------|---------------------------|
| 2.7V<br>(T1)              | 1                        | 105  | 1.8                     | 3                   | 8 × 11.5                  |
|                           | 2.2                      | 225  | 1.0                     | 1.3                 | 8 × 20                    |
|                           | 3.3                      | 335  | 0.6                     | 1.0                 | 10 × 20                   |
|                           | 4.7                      | 475  | 0.4                     | 0.6                 | 12.5 × 20                 |
|                           | 10                       | 106  | 0.2                     | 0.25                | 12.5 × 31.5               |
|                           | 22                       | 226  | 0.07                    | 0.13                | 16 × 31.5                 |
|                           | 33                       | 336  | 0.06                    | 0.08                | 18 × 31.5                 |
|                           | 47                       | 476  | 0.05                    | 0.06                | 18 × 40                   |

Note :

The capacitance calculated from discharge time (ΔT) with constant current ( i ) after 30minute charge with rated voltage (2.7V).

The discharge current ( i ) is 0.01 × rated capacitance (F).

The discharge time (ΔT) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

$$\text{Capacitance (F)} = i \times \Delta T$$

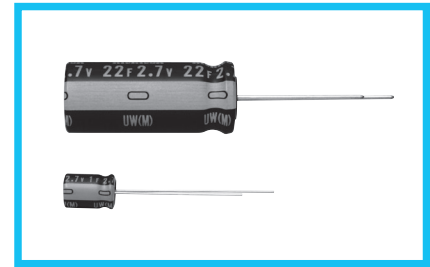
※ The listed DCR value is typical and therefore not a guaranteed value.

**JUW**

Radial Lead Type, High Capacitance

- High Capacitance type (2.7V).
- Higher capacitance than JUM.
- Wide temperature range (– 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

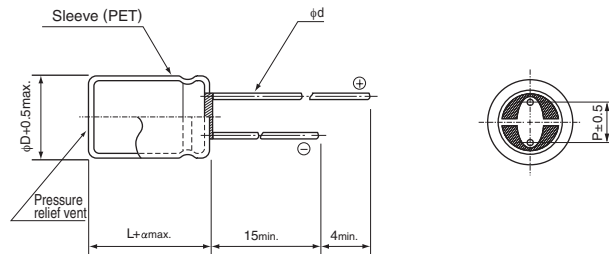
**JUM**  
Higher  
Capacitance

**JUW**

## Specifications

| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | − 25 to +70°C   |                    |   |
| Rated Voltage                | 2.7V  |                    |   |
| Rated Capacitance Range      | 1 to 82F See Note   |                    |   |
| Capacitance Tolerance        | ±20% , 20°C   |                    |   |
| Stability at Low Temperature | Capacitance (− 25°C) / Capacitance (+20°C) ×100 ≥ 70% ESR (− 25°C) / ESR (+20°C) ≤4   |                    |   |
| ESR, 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 1000 hours at 70°C.         | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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.    | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 300% or less than the initial specified value |
| Marking                      | Printed with white color letter on black sleeve.  |                    |   |

## Drawing



|    |     |     |                    |                    |     |     |
|----|-----|-----|--------------------|--------------------|-----|-----|
| φD | 6.3 | 8   | 10                 | 12.5               | 16  | 18  |
| P  | 2.5 | 3.5 | 5.0                | 5.0                | 7.5 | 7.5 |
| φd | 0.5 | 0.6 | 0.6 <sup>(*)</sup> | 0.6 <sup>(*)</sup> | 0.8 | 0.8 |

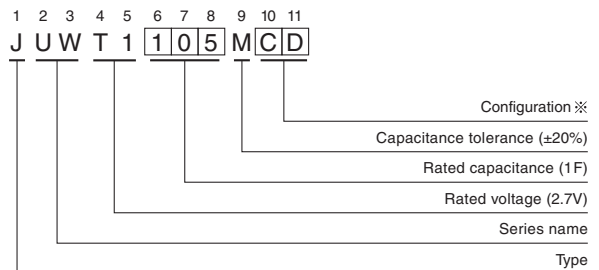
(mm)

|          |               |
|----------|---------------|
| $\alpha$ | (φD < 10) 1.5 |
|          | (φD ≥ 10) 2.0 |

※ In case L>25 for the φ10 and φ12.5 dia unit, lead dia φd=0.8

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

## Type numbering system (Example : 2.7V 1F)



※ Configuration

| φ D        | Pb-free lead finishing<br>Pb-free PET sleeve |
|------------|--|
| 6.3        | CD   |
| 8 · 10     | PD   |
| 12.5 to 18 | HD   |

## Dimensions

| Rated Voltage<br>( Code ) | Rated Capacitance<br>(F) | Code | ESR<br>(Ω)<br>(at 1kHz) | DCR※<br>Typical (Ω) | Case size<br>φ D × L (mm) |
|---------------------------|--------------------------|------|-------------------------|---------------------|---------------------------|
| 2.7V<br>(T1)              | 1.0                      | 105  | 1.8                     | 4                   | 6.3 × 9                   |
|                           | 1.5                      | 155  | 1.2                     | 2.5                 | 8 × 11.5                  |
|                           | 2.7                      | 275  | 0.6                     | 1.2                 | 8 × 20                    |
|                           | 3.3                      | 335  | 0.5                     | 1.1                 | 10 × 12.5                 |
|                           | 4.7                      | 475  | 0.4                     | 0.8                 | 10 × 20                   |
|                           | 6.8                      | 685  | 0.3                     | 0.7                 | 12.5 × 20                 |
|                           | 12                       | 126  | 0.3                     | 0.6                 | 10 × 31.5                 |
|                           | 22                       | 226  | 0.2                     | 0.4                 | 12.5 × 31.5               |
|                           | 33                       | 336  | 0.12                    | 0.28                | 16 × 31.5                 |
|                           | 47                       | 476  | 0.1                     | 0.22                | 18 × 31.5                 |
|                           | 82                       | 826  | 0.06                    | 0.13                | 18 × 40                   |

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

Note :

The capacitance calculated from discharge time (ΔT) with constant current (i) after 30minute charge with rated voltage (2.7V).

The discharge current (i) is 0.01 × rated capacitance (F).

The discharge time (ΔT) measured between 2V and 1V with constant current.

The capacitance calculated below.

$$\text{Capacitance (F)} = i \times \Delta T$$

**JUK**

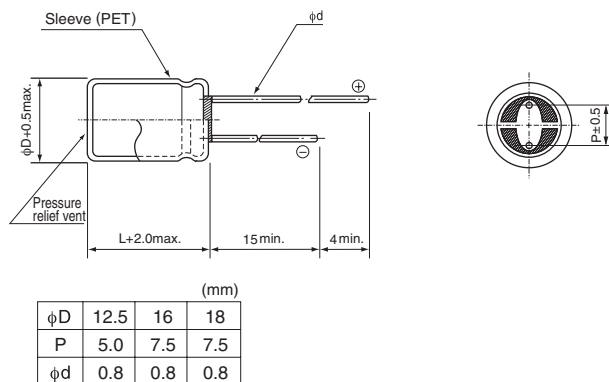
Radial Lead Type, Lower Resistance

- Lower resistance type of JUM.
- Suited for Smart Meters.
- Lower temperature range (– 40 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

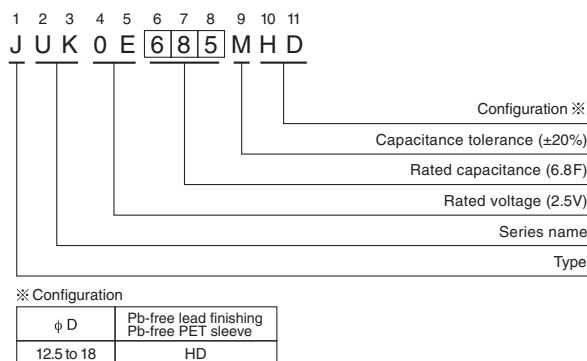
**JUM**  
Lower  
resistance

**JUK****Specifications**

| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | − 40 to +70°C   |                    |   |
| Rated Voltage                | 2.5V  |                    |   |
| Rated Capacitance            | 6.8 to 27F    See Note  |                    |   |
| Capacitance Tolerance        | ±20% , 20°C   |                    |   |
| Stability at Low Temperature | Capacitance (− 40°C) / Capacitance (+20°C) ×100 ≥ 70%    ESR (− 40°C) / ESR (+20°C) ≤ 7   |                    |   |
| ESR, 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 1000 hours at 70°C.         | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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.    | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 300% or less than the initial specified value |
| Marking                      | Printed with white color letter on black sleeve.  |                    |   |

**Drawing**

## Type numbering system (Example : 2.5V 6.8F)



- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

**Dimensions**

| Rated Voltage<br>( Code ) | Rated Capacitance<br>( F ) | Code | ESR<br>(Ω)<br>(at 1kHz) | DCR※<br>Typical (Ω) | Case size<br>φ D × L (mm) |
|---------------------------|----------------------------|------|-------------------------|---------------------|---------------------------|
| 2.5V<br>(0E)              | 6.8                        | 685  | 0.075                   | 0.085               | 12.5 × 31.5               |
|                           | 12                         | 126  | 0.060                   | 0.065               | 16 × 31.5                 |
|                           | 18                         | 186  | 0.055                   | 0.055               | 18 × 31.5                 |
|                           | 27                         | 276  | 0.040                   | 0.035               | 18 × 40                   |

Note :

The capacitance calculated from discharge time (ΔT) 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 (ΔT) measured between 2V and 1V with constant current.

The capacitance calculated below.

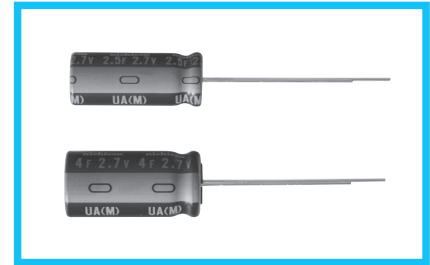
$$\text{Capacitance (F)} = i \times \Delta T$$

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

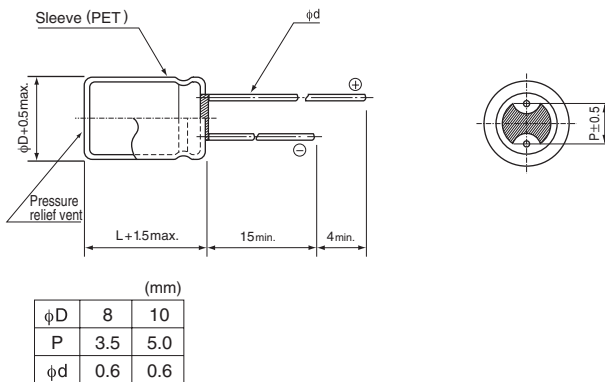
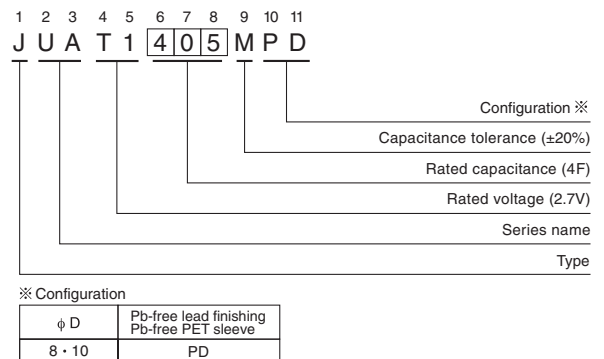
**JUA**

Radial Lead Type, Lower Resistance, Long Life

- Lower resistance and long life type of JUM.
- Lower temperature range (– 40 to +70°C).
- Load life of 2000hours at 70°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

**JUA****Specifications**

| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | − 40 to +70°C   |                    |   |
| Rated Voltage                | 2.7V  |                    |   |
| Rated Capacitance            | 1.2 to 4.7F    See Note   |                    |   |
| Capacitance Tolerance        | ± 20% , 20°C  |                    |   |
| Stability at Low Temperature | Capacitance (− 40°C) / Capacitance (+20°C) ×100 ≥ 70%    ESR (− 40°C) / ESR (+20°C) ≤ 7   |                    |   |
| ESR                          | Refer to the table below (20°C).  |                    |   |
| 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 70°C.         | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 400% 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 1000 hours at 70°C. | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 400% 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.    | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 300% or less than the initial specified value |
| Marking                      | Printed with white color letter on black sleeve.  |                    |   |

**Drawing****Type numbering system (Example : 2.7V 4F)****Dimensions**

| Rated Voltage<br>( Code ) | Rated Capacitance<br>( F ) | Code | ESR<br>(Ω)<br>(at 1kHz) | DCR※<br>Typical (Ω) | Case size<br>φ D × L (mm) |
|---------------------------|----------------------------|------|-------------------------|---------------------|---------------------------|
| 2.7V<br>(T1)              | 1.2                        | 125  | 0.40                    | 0.40                | 8 × 11.5                  |
|                           | 2.0                        | 205  | 0.25                    | 0.25                | 10 × 12.5                 |
|                           | 2.5                        | 255  | 0.15                    | 0.15                | 8 × 20                    |
|                           | 4.0                        | 405  | 0.10                    | 0.10                | 10 × 20                   |
|                           | 4.7                        | 475  | 0.15                    | 0.13                | 10 × 20                   |

Note :

The capacitance calculated from discharge time (ΔT) with constant current ( i ) after 30minute charge with rated voltage (2.7V).

The discharge current ( i ) is 0.01 × rated capacitance (F).

The discharge time (ΔT) measured between 2V and 1V with constant current.

The capacitance calculated below.

$$\text{Capacitance (F)} = i \times \Delta T$$

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

JJC

Snap-in Terminal Type

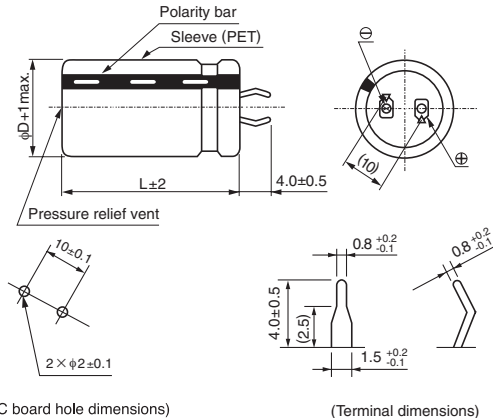
- Excellent in voltage holding property.
- Suitable for quick charge and discharge.
- Wide temperature range (– 25°C to + 60°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



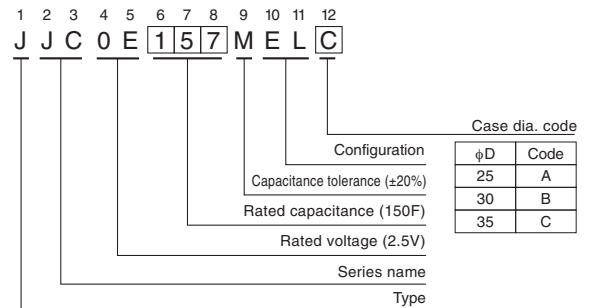
## Specifications

| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | − 25 to +60°C   |                    |   |
| Rated Voltage Range          | 2.5V  |                    |   |
| Rated Capacitance Range      | 56 to 200F    See Note  |                    |   |
| Capacitance Tolerance        | ± 20% (20°C)  |                    |   |
| Stability at Low Temperature | Capacitance (− 25°C) / Capacitance (+20°C) ×100 ≥ 70%    ESR (− 25°C) / ESR (+20°C) ≤ 7   |                    |   |
| ESR, 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.         | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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. | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 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.    | Capacitance change | Within ±30% of the initial capacitance value  |
|                              |   | ESR                | 300% or less than the initial specified value |
| Marking                      | Printed with white color letter on black sleeve.  |                    |   |

## Drawing



## Type numbering system (Example : 2.5V 150F)



## Dimensions

| Rated Voltage (code) | Cap. (F) | Cap. code | ESR(mΩ) (at 1kHz) | DCR※ Typical (mΩ) | Case size φD×L (mm) |          |          |
|----------------------|----------|-----------|-------------------|-------------------|---------------------|----------|----------|
|                      |          |           |                   |                   | φ 25 (A)            | φ 30 (B) | φ 35 (C) |
| 2.5V (0E)            | 56       | 566       | 70                | 50                | 25 × 40             | 30 × 30  |          |
|                      | 68       | 686       | 60                | 45                |                     |          | 35 × 30  |
|                      | 82       | 826       | 60                | 35                | 25 × 50             | 30 × 40  |          |
|                      | 100      | 107       | 50                | 30                |                     |          | 35 × 35  |
|                      | 120      | 127       | 50                | 25                |                     | 30 × 50  | 35 × 40  |
|                      | 150      | 157       | 40                | 22                |                     |          | 35 × 50  |
|                      | 200      | 207       | 30                | 16                |                     |          | 35 × 50  |

Note :

The capacitance calculated from discharge time (ΔT) 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 (ΔT) measured between 2V and 1V with constant current.

The capacitance calculated bellow.

$$\text{Capacitance (F)} = i \times \Delta T$$

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

JJD

Screw Terminal Type, High Energy Density Type

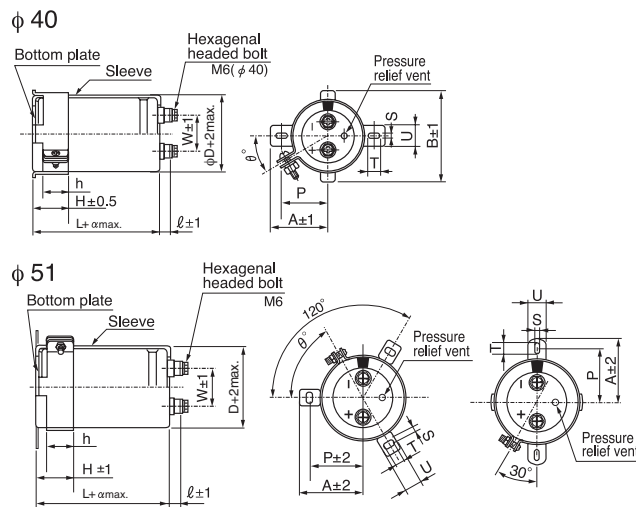
- High energy density.
- Suitable for electric power storage.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



## 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.         | 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. | 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.    | 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)

|  |   |   |   |   |   |   |   |   |    |    |    |    |    |
|--|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| J  | J | D | 0 | E | 1 | 0 | 8 | M | S  | E  | D  |    |    |
| <div> <div>Case dia. code(φ40)</div> <div>Configuration ※</div> <div>Capacitance tolerance (±20%)</div> <div>Rated capacitance (1000F)</div> <div>Rated voltage (2.5V)</div> <div>Series name</div> <div>Type</div> </div>   |   |   |   |   |   |   |   |   |    |    |    |    |    |
| <div> <div>※ Configuration</div> <div>Cr (III) Plating (RoHS compliant)</div> <div>SE</div> </div>   |   |   |   |   |   |   |   |   |    |    |    |    |    |
| <div> <div>Mounting bracket</div> <div> <div>φD</div> <div>Code</div> <div>Code less</div> <div>2-leg brackets</div> <div>BN</div> <div>No brackets</div> </div> <div> <div>φ51</div> <div>Code less</div> <div>3-leg brackets</div> <div>BB</div> <div>2-leg brackets</div> <div>BN</div> <div>No bracket</div> </div> </div> |   |   |   |   |   |   |   |   |    |    |    |    |    |

### 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  $0.01 \times$  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 of terminal pitch(W) and length( $\ell$ ) and Normal dia. of bolt (mm)

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

## 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 mounting bracket (mm)

| Symbol | Leg shape φD | 3-Legs |     | 2-Legs |  |
|--------|--------------|--------|-----|--------|--|
|        |              | 51     | 40  | 51     |  |
| 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.

J J L

Screw Terminal Type, High Power Density Type

- High power density.
- Rapid charge-discharge.
- Suitable for regeneration and UPS applications.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

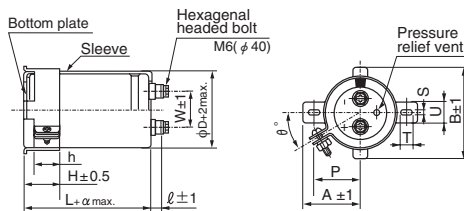


## ■ Specifications

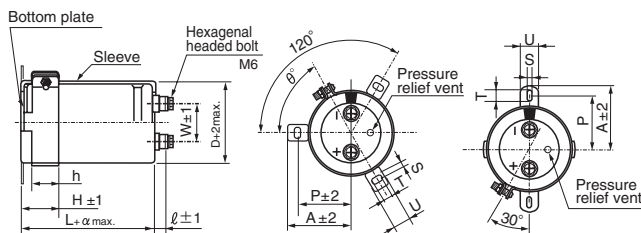
| Item                         | Performance Characteristics   |                    |   |
|------------------------------|---|--------------------|---|
| Category Temperature Range   | - 25 to +60°C   |                    |   |
| Rated Voltage Range          | 2.5V  |                    |   |
| Rated Capacitance Range      | 700 to 2000F See Note   |                    |   |
| Capacitance Tolerance        | ±20%(20°C)  |                    |   |
| Stability at Low 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.         | 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. | 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.    | 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

φ 40



φ 51



## Type numbering system (Example : 2.5V 700F)

|  |   |   |   |   |   |   |   |   |    |    |    |    |    |
|--|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| J  | J | L | 0 | E | 7 | 0 | 7 | M | S  | E  | D  |    |    |
| <div> <div>Configuration ※</div> <div>Capacitance tolerance (±20%)</div> <div>Rated capacitance (700F)</div> <div>Rated voltage (2.5V)</div> <div>Series name</div> <div>Type</div> </div>       |   |   |   |   |   |   |   |   |    |    |    |    |    |
| <div> <div>Cr (III) Plating (RoHS compliant)</div> <div>SE</div> </div>  |   |   |   |   |   |   |   |   |    |    |    |    |    |
| <div> <div>Case dia. code(φ40)</div> <div>φD Code</div> <div>40 D</div> <div>51 F</div> </div>   |   |   |   |   |   |   |   |   |    |    |    |    |    |
| <div> <div>Mounting bracket</div> <div>Code less 2-leg brackets</div> <div>BN No brackets</div> <div>Code less 3-leg brackets</div> <div>BB 2-leg brackets</div> <div>BN No bracket</div> </div> |   |   |   |   |   |   |   |   |    |    |    |    |    |

## 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  $0.01 \times$  rated capacitance (F).  
 The discharge time ( $\Delta T$ ) measured between 2V and 1V with constant current.  
 The capacitance calculated below.  
 $\text{Capacitance (F)} = i \times \Delta T$

- Dimensions of terminal pitch(W) and length(  $\ell$  ) and Normal dia. of bolt (mm)

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

## ■ Dimensions

| Rated Voltage (Code) | Cap. (F) | Cap. code | DCR※ Typical (mΩ) | Case size φ D × L (mm) |     | Ref. Weight (g) |
|----------------------|----------|-----------|-------------------|------------------------|-----|-----------------|
|                      |          |           |                   | φ D                    | L   |                 |
| 2.5V (0E)            | 700      | 707       | 3.5               | 40                     | 105 | 210             |
|                      | 1000     | 108       | 2.5               |                        | 142 | 250             |
|                      | 1200     | 128       | 2.2               |                        | 167 | 300             |
|                      | 1100     | 118       | 2.8               | 51                     | 105 | 380             |
|                      | 1700     | 178       | 1.7               |                        | 142 | 500             |
|                      | 2000     | 208       | 1.5               |                        | 167 | 600             |

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

- Dimensions of mounting bracket (mm)

| Symbol | Leg shape φD | 3-Legs |     | 2-Legs |  |
|--------|--------------|--------|-----|--------|--|
|        |              | 51     | 40  | 51     |  |
| 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.