

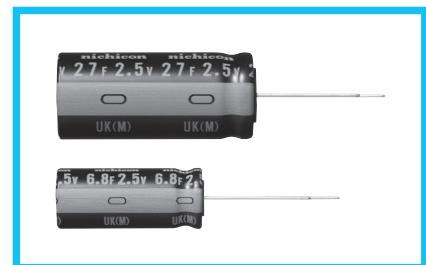


Radial Lead Type, Lower Resistance

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

JUM  
Lower resistance

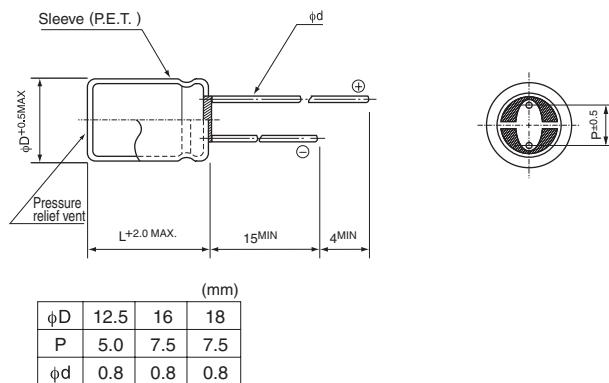
JUK



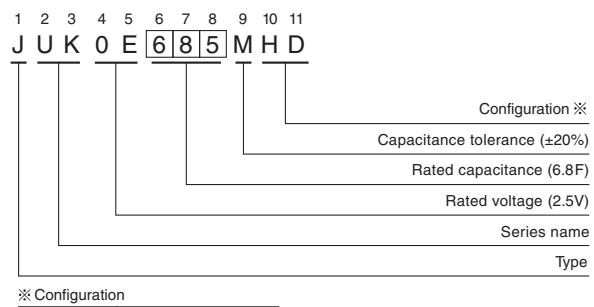
## ■ Specifications

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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
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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>ESR</td> <td>300% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	300% or less than the initial specified value
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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)



※ Configuration

φ D	Pb-free lead finishing Pb-free PET sleeve
12.5 to 18	HD

- Please refer to page 20 about the end seal configuration.

## ■ Dimensions

Rated Voltage (Code)	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR* Typical (Ω)	Case size φ D × L (mm)
2.5V (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 ( $\Delta T$ ) 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 bellow.

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

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