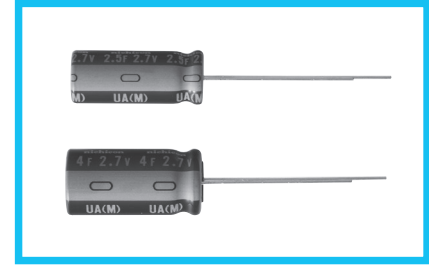




Radial Lead Type, Lower Resistance, Long Life

- 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).

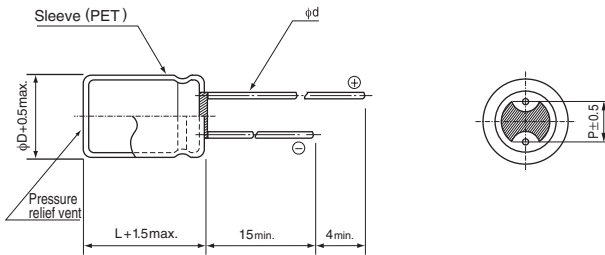


Products which are scheduled to be discontinued.  
Not recommended for new designs.

## Specifications

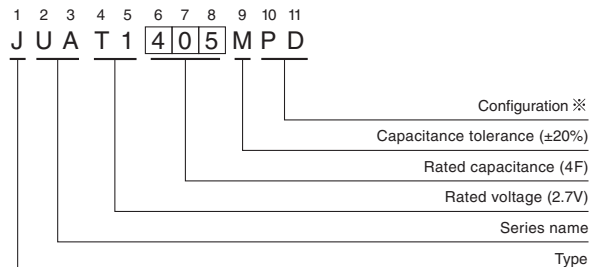
Item	Performance Characteristics					
Category Temperature Range	− 40 to +70°C					
Rated Voltage	2.7V					
Rated Capacitance	1.2 to 4.7F See Note					
Capacitance Tolerance	±20% , 20°C					
Stability at Low Temperature	Capacitance (− 40°C) / Capacitance (+20°C) ×100 ≥ 70% ESR (− 40°C) / ESR (+20°C) ≤ 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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>400% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	400% or less than the initial specified value
	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.	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>ESR</td> <td>400% or less than the initial specified value</td> </tr> </table>	Capacitance change	Within ±30% of the initial capacitance value	ESR	400% or less than the initial specified value
	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.	<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					
Marking	Printed with white color letter on black sleeve.					

## Drawing



(mm)		
φD	8	10
P	3.5	5.0
φd	0.6	0.6

## Type numbering system (Example : 2.7V 4F)



※ Configuration

φ D	Pb-free lead finishing Pb-free PET sleeve
8 · 10	PD

## Dimensions

Rated Voltage ( Code )	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR※ Typical (Ω)	Case size φ D × L (mm)
2.7V (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.