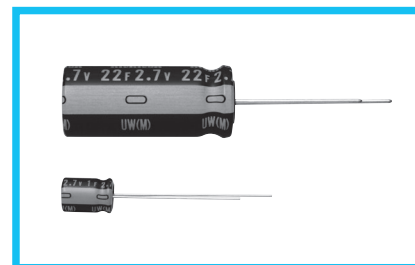
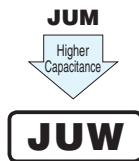


# JUW

Radial Lead Type, High Capacitance

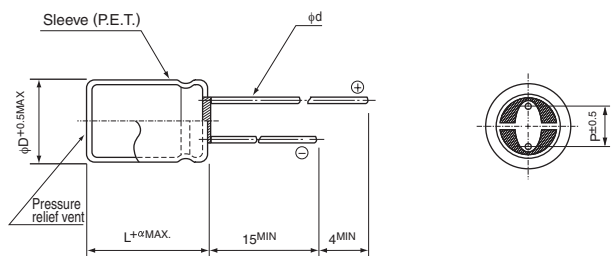
- High Capacitance type (2.7V).
- Higher capacitance than JUM.
- Wide temperature range (−25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



## 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.	<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
	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.	<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



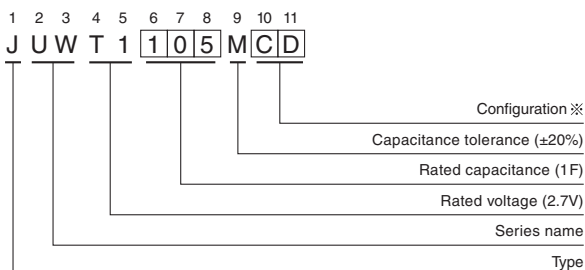
	φD	6.3	8	10	12.5	16	18
P		2.5	3.5	5.0	5.0	7.5	7.5
φd		0.5	0.6	0.6*	0.6*	0.8	0.8

$\alpha$	(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 page 18 about the end seal configuration.

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



※ Configuration

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

## Dimensions

Rated Voltage (Code)	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR※ Typical (Ω)	Case size φ D × L (mm)
2.7V (T1)	1.0	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.

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