ELECTRIC DOUBLE LAYER CAPACITORS "EVerCAP®"

UC series
Radial Lead Type

- Excellent in voltage holding property.
- Suitable for quick charge and discharge.
- Wide temperature range (− 25 ~ +70°C).
- Adapted to the RoHS directive (2002/95/EC).
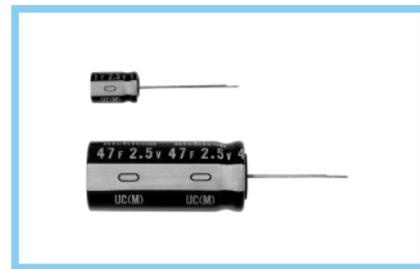
■Specifications

Item	Performance Characteristics			
Category Temperature Range	− 25 ~ +70°C			
Rated Voltage Range	2.5V			
Rated Capacitance Range	0.47 ~ 47F See Note			
Capacitance Tolerance	±20% (20°C)			
Leakage Current	0.5C (mA) [C : Rated Capacitance(F)](After 30 minutes' application of rated voltage, 2.5V)			
Stability at Low Temperature	Capacitance (− 25°C) / Capacitance (+20°C) ×100 ≧ 70%			
ESR, DCR*	Refer to the list below (20°C). *DC internal resistance			
Endurance	After an application of DC voltage for 1000 hours at 70°C, capacitors meet the characteristic requirements listed at right.	Capacitance change	Within ±30% of initial value	
		Internal resistance (ESR)	300% or less of initial specified value	
		Leakage current	Initial specified value or less	
Shelf Life	After storing the capacitors under no load at 70°C for 1000hours, they will meet the characteristic requirements listed at right.	Capacitance change	Within ±30% of initial value	
		Internal resistance (ESR)	300% or less of initial specified value	
		Leakage current	Initial specified value or less	
Marking	Printed with white color letter on black sleeve.			

■Drawing
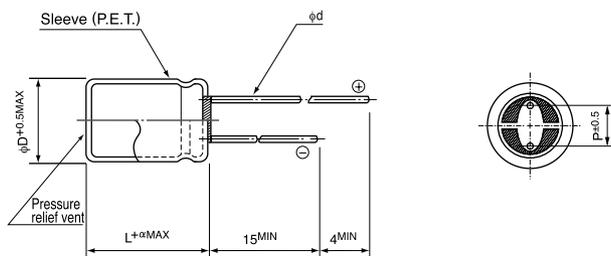
(mm)

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

α	(φD < 10) 1.0
	(φD ≧10) 1.5

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

• Please refer to page 21 for end seal configulation.

Type numbering system (Example : 2.5V 1F)

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1 2 3  4 5  6 7 8  9  10 11
J U C  0 E  1 0 5  M  P  D
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- Configuration ※
- Capacitance tolerance (±20%)
- Rated Capacitance (1F)
- Rated voltage (2.5V)
- Series name
- Type
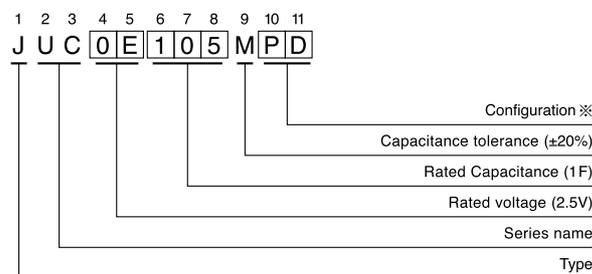
※ Configuration

φ D	Pb-free lead finishing Pb-free PET sleeve
6.3	ED
8, 10	PD
12.5 ~ 18	HD

■Dimensions

Rated Voltage (Code)	Rated Capacitance (F)	Code	ESR (Ω) (at 1kHz)	DCR (Ω)	Case size φ D × L (mm)
2.5V (0E)	0.47	474	7	11	6.3 × 11
	1.0	105	2	5	8 × 11.5
	2.2	225	1	2	8 × 20
	3.3	335	1	1.5	10 × 20
	4.7	475	0.5	1	12.5 × 20
	10	106	0.1	0.5	12.5 × 31.5
	10	106	0.1	0.5	10 × 40
	22	226	0.1	0.3	16 × 31.5
	33	336	0.1	0.2	18 × 31.5
	47	476	0.1	0.2	18 × 40

Note :
To calculate capacitance, the capacitor must be charged at the rated voltage of 2.5V for 30 minutes. Measure the time of duration ΔT (sec.) it takes go from 2V to 1V when a constant current discharge of i (A) = 0.01 × nominal capacitance is carried out. It is then possible to calculate capacitance based on the calculation provided below.

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

CAT.8100V