Excellent Integrated System Limited

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Nichicon
JUC0E105MPD

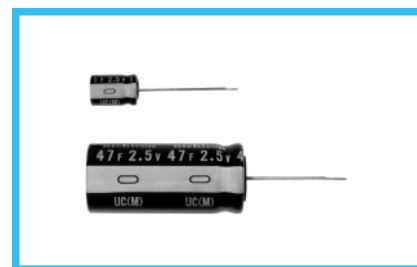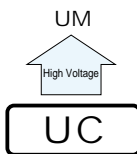For any questions, you can email us directly:
sales@integrated-circuit.com

ELECTRIC DOUBLE LAYER CAPACITORS "EVerCAP®"

nichicon

UC series
Radial Lead Type

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

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

UM
High Voltage

UC

■Specifications

Item	Performance Characteristics		
Category Temperature Range	− 25 to +70°C		
Rated Voltage Range	2.5V		
Rated Capacitance Range	0.47 to 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	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
		Leakage current	Less than or equal to 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
		Leakage current	Less than or equal to the initial specified value
Marking	Printed with white color letter on black sleeve.		

■Drawing

Sleeve (P.E.T.)
φd
φD+0.5MAX.
Pressure relief vent
L+αMAX.
15MIN
4MIN
P±0.5
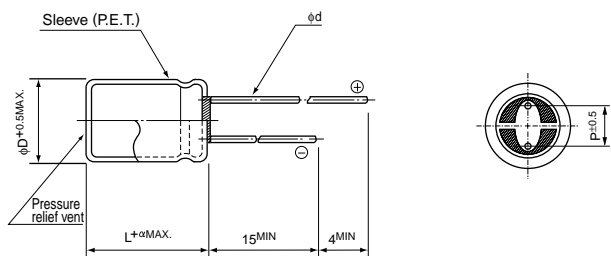
(mm)

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※1	0.6※2	0.8	0.8

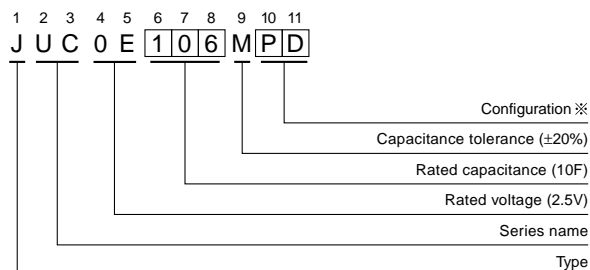| α	(φD < 10) 1.5
	(φD ≧10) 2.0

※1 In case φ10 × 40, lead dia φd=0.8
※2 In case L>25 for the φ12.5 dia unit, lead dia φd=0.8

- Please refer to page 20 for end seal configuration.

Type numbering system (Example : 2.5V 10F φ10×40L)

1	2	3	4	5	6	7	8	9	10	11
J	U	C	0	E	1	0	6	M	P	D

Configuration ※
Capacitance tolerance (±20%)
Rated capacitance (10F)
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 to 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 × 9
	1.0	105	2	5	8 × 11.5
	2.2	225	2	2	8 × 20
	3.3	335	1	1.5	10 × 20
	4.7	475	0.5	1	12.5 × 20
	10	106	0.2	0.5	12.5 × 31.5
	10	106	0.2	0.5	10 × 40
	22	226	0.2	0.3	16 × 31.5
	33	336	0.1	0.2	18 × 31.5
	47	476	0.1	0.2	18 × 40

Note :
The capacitance calculated from discharge time (ΔT) with constant current (i) after 30minuite charge with rated voltage (2.5V).
The discharge current (i) is 0.01 × F (rated capacitance).
A discharge time (ΔT) measured between 2V and 1V with constant current.
The capacitance calculated bellow.

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

CAT.8100Y