ELECTRIC DOUBLE LAYER CAPACITORS "EVerCAP®"

Radial Lead Type, High Voltage, Smaller-Sized

nichicon





- High voltage type (2.7V).
- One rank smaller case sized than UM series.
- Wide temperature range (- 25 to +70°C).
- Compliant to the RoHS directive (2002/95/EC).

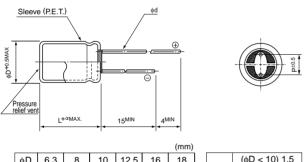




Specifications

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					
Leakage Current	0.5C (mA) [C: Rated Capacitance(F)] (After 30 minutes' application of rated voltage, 2.7V)					
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	Capacitance change	Within ±30% of the initial capacitance value			
	are restored to 20°C after the rated voltage is applied for 1000 hours	ESR	300% or less than the initial specified value			
	at 70°C.	Leakage current	Less than or equal to the initial specified value			
Shelf Life	The specifications listed at right shall be met when the capacitors	Capacitance change	Within ±30% of the initial capacitance value			
	are restored to 20°C after storing the capacitors under no load	ESR	300% or less than the initial specified value			
	for 1000 hours at 70°C.	Leakage current	Less than or equal to the initial specified value			
Marking	Printed with white color letter on black sleeve.					

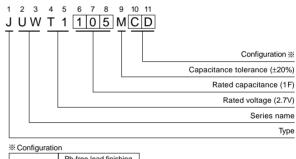
Drawing



(¢D < 10) 1.5 φD 6.3 8 12.5 10 16 18 α (¢D ≧10) 2.0 Ρ 2.5 3.5 5.0 5.0 7.5 7.5 0.6* 0.6* φd 0.5 0.6 0.8 0.8 % In case L>25 for the ϕ 10 and ϕ 12.5 dia unit, lead dia ϕ d=0.8

• Please refer to page 20 about the end seal configulation.

Type numbering system (Example : 2.7V 1F)



φD	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 $\phi D \times L (mm)$
	1	105	4	4	6.3×9
	1.5	155	3	2.5	8×11.5
	2.7	275	2	1.2	8×20
	4.7	475	1	0.8	10×20
2.7V	6.8	685	0.8	0.7	12.5×20
(T1)	12	126	0.4	0.6	10×31.5
	22	226	0.3	0.4	12.5 × 31.5
	33	336	0.2	0.28	16 imes 31.5
	47	476	0.2	0.22	18×31.5
	82	826	0.1	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 30minuite charge with rated voltage (2.7V).
- The discharge current (i) is $0.01 \times \text{rated capacitance (F)}$. The discharge time (ΔT) measured between 2V and 1V with
- constant current.

The capacitance calculated bellow.

Capacitance (F) = $i \times \Delta T$

