ELECTRIC DOUBLE LAYER CAPACITORS "EVerCAP®"

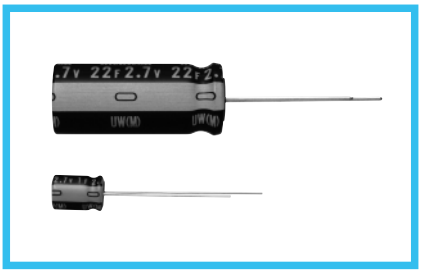
nichicon

UW series

Radial Lead Type, High Voltage, Smaller-Sized

- 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 (2011/65/EU).

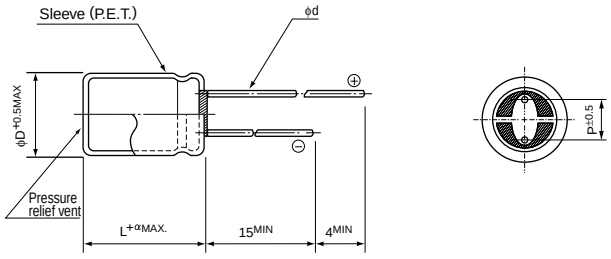
UM
Smaller
UW



■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 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.	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



(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) 1.5
	(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 20 about the end seal configuration.

Type numbering system (Example : 2.7V 1F)

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

- 10, 11: Configuration ※
- 9: Capacitance tolerance (±20%)
- 6, 7, 8: Rated capacitance (1F)
- 5: Rated voltage (2.7V)
- 4: Series name
- 1, 2, 3: Type

※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	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
	6.8	685	0.8	0.7	12.5 × 20
	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 × 31.5
	47	476	0.2	0.22	18 × 31.5
	82	826	0.1	0.13	18 × 40

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 × rated capacitance (F).
The discharge time (ΔT) measured between 2V and 1V with constant current.
The capacitance calculated bellow.

Capacitance (F) = i × ΔT

※ The listed DCR value is typical and therefore not a guaranteed value.