ELECTRIC DOUBLE LAYER CAPACITORS "EVerCAP®"

nichicon

UM Radial Lead Type, High Voltage series

- High voltage type (2.7V).
- Suitable for quick charge and discharge.
- Wide temperature range (– 25 to +70°C).
- Compliant to the RoHS directive (2011/65/EU).

UM

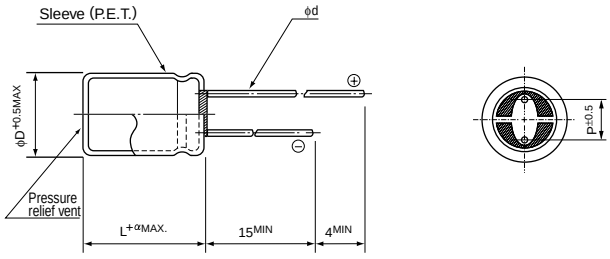
Smaller

UW

■Specifications

Item	Performance Characteristics		
Category Temperature Range	– 25 to +70°C		
Rated Voltage Range	2.7V		
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 : 2.7V)		
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 φ12.5 dia unit, lead dia φd=0.8

• Please refer to page 20 for end seal configuration.

Type numbering system (Example : 2.7V 10F)

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

Configuration※
Capacitance tolerance (±20%)
Rated capacitance (10F)
Rated voltage (2.7V)
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※ Typical (Ω)	Case size φ D × L (mm)
2.7V (T1)	0.47	474	4	6	6.3 × 9
	1	105	2	3	8 × 11.5
	2.2	225	2	1.3	8 × 20
	3.3	335	1	1.0	10 × 20
	4.7	475	0.4	0.6	12.5 × 20
	10	106	0.2	0.25	12.5 × 31.5
	22	226	0.2	0.13	16 × 31.5
	33	336	0.1	0.08	18 × 31.5
	47	476	0.1	0.06	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 × rated capacitance (F).
The discharge time (ΔT) measured between 2V and 1V with constant current.
The capacitance calculated bellow.

Capacitance (F) = i × ΔT