nichicon

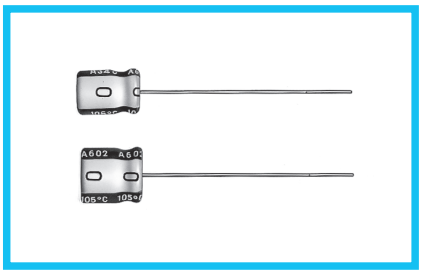
USV

7mmL, Long Life Assurance

Long Life

- Extended load life of 5000 hours at +105˚C, with 7mm height.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

UST Long Life USV



■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105˚C
Rated Voltage Range	6.3 to 50V
Rated Capacitance Range	1 to 220μF
Capacitance Tolerance	±20% at 120Hz, 20˚C
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01CV or 3(μA), whichever is greater.
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20˚C

Rated voltage (V)	6.3	10	16	25	35	50
tan δ (MAX.)	0.24	0.21	0.18	0.15	0.13	0.12

Stability at Low Temperature — Measurement frequency : 120Hz

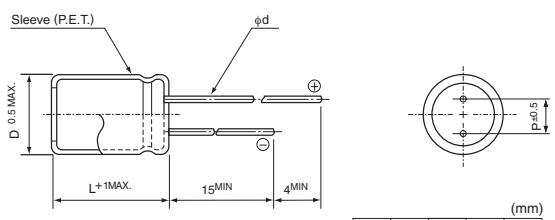
Rated voltage (V)		6.3	10	16	25	35	50
Impedance ratio (MAX.)	Z−25˚C / Z+20˚C	4	3	2	2	2	2
	Z−40˚C / Z+20˚C	8	6	4	3	3	3

Endurance — The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.

Capacitance change	Within ±30% of the initial capacitance value
tan δ	300% or less than the initial specified value
Leakage current	Less than or equal to the initial specified value

Item	Performance Characteristics
Shelf Life	After storing the capacitors under no load at 105˚C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.
Marking	Printed with silver color letter on dark brown sleeve.

■Radial Lead Type



(mm)

φD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.45	0.5

Type numbering system (Example: 10V 33μF)

1	2	3	4	5	6	7	8	9	10	11
U	S	V	1	A	3	3	0	M	F	D

- Configuration ※
- Capacitance tolerance (±20%)
- Rated capacitance (33μF)
- Rated voltage (10V)
- Series name
- Type

※ Configuration

φD	Pb-free leadwire Pb-free PET sleeve
4 to 8	FD

■Dimensions

Cap.(μF)	Code	V: 6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
1	010											4 × 7	10
2.2	2R2											4 × 7	19
3.3	3R3											4 × 7	24
4.7	4R7									4 × 7	24	5 × 7	29
10	100					4 × 7	29	5 × 7	33	5 × 7	36	6.3 × 7	44
22	220	4 × 7	34	5 × 7	38	5 × 7	44	6.3 × 7	51	6.3 × 7	57	8 × 7	65
33	330	5 × 7	42	5 × 7	47	6.3 × 7	57	6.3 × 7	63	8 × 7	72		
47	470	5 × 7	50	6.3 × 7	59	6.3 × 7	68	8 × 7	78				
100	101	6.3 × 7	77	8 × 7	96	8 × 7	107					Case size φD × L (mm)	Rated ripple
220	221	8 × 7	130										

Rated ripple current (mArms) at 105˚C 120Hz

- Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.