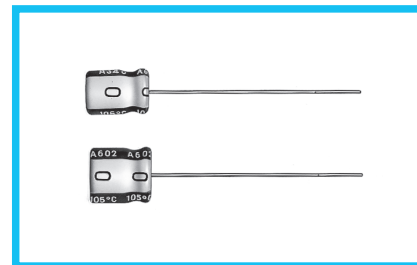


USV

7mmL, Long Life Assurance



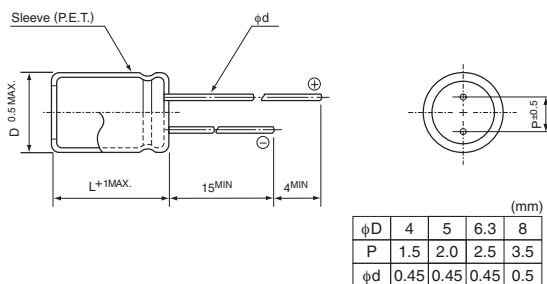
- Extended load life of 5000 hours at +105°C, with 7mm height.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



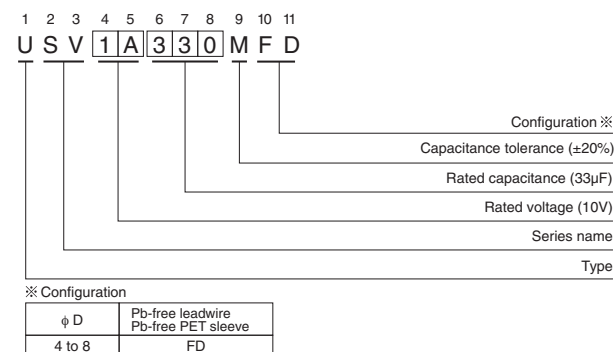
## Specifications

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.				<table><tr><td>Capacitance change</td><td>Within ±30% of the initial capacitance value</td></tr><tr><td>tan δ</td><td>300% or less than the initial specified value</td></tr><tr><td>Leakage current</td><td>Less than or equal to the initial specified value</td></tr></table>			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
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												
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



## Type numbering system (Example: 10V 33μF)



## Dimensions

V Cap.(μF) Code		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 φ D × L (mm)	Rated ripple
220	221	8 × 7	130										

Rated ripple current (mA rms) 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.