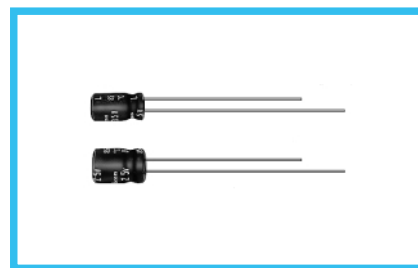
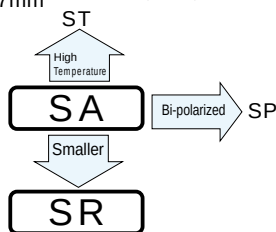


SA 7mmL, For General Purposes series

- Standard miniature series with 7mm height.
- Compliant to the RoHS directive (2011/65/EU).

SR 7mmL, High CV series

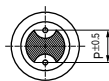
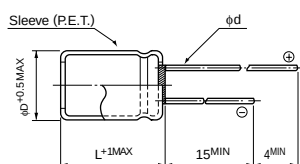
- Higher CV series with 7mm height.



Specifications

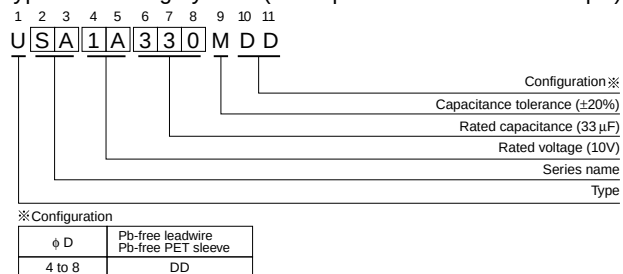
Item	SA series					SR series			
Category Temperature Range	− 40 to +85°C					−40 to +85°C			
Rated Voltage Range	6.3 to 50V					4 to 50V			
Rated Capacitance Range	0.1 to 220μF					0.1 to 470μF			
Capacitance Tolerance	± 20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.								
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C								
	Rated voltage (V)	4	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.35	0.24	0.20	0.16	0.14	0.12	0.10	
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)		4	6.3	10	16	25	35	50
	Impedance ratio	Z−25°C / Z+20°C	6	4	3	2	2	2	2
	ZT / Z20 (MAX.)	Z−40°C / Z+20°C	12	8	6	4	4	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 2000 hours at 85°C.					Capacitance change		Within ±20% of the initial capacitance value	
						tan δ		200% 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 85°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 white color letter on black sleeve.								

Radial Lead Type



	4	5	6.3	8
φD (mm)	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 : SA series : 10V 33μF)



Dimensions

V(Code) Series Code		4 (0G)	6.3 (0J)	10 (1A)	16 (1C)	25 (1E)	35 (1V)	50 (1H)
Cap.(μF)		SR	SA	SR	SA	SR	SA	SR
0.1	0R1							4 × 7 1.0
0.22	R22							4 × 7 2.3
0.33	R33							4 × 7 3.5
0.47	R47							4 × 7 5.0
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 28	4 × 7 28	5 × 7 33	4 × 7 28
22	220		4 × 7 34	4 × 7 34	5 × 7 38	4 × 7 35	5 × 7 44	4 × 7 39
33	330	4 × 7 33	5 × 7 42	4 × 7 40	5 × 7 47	4 × 7 43	6.3 × 7 57	5 × 7 55
47	470	4 × 7 39	5 × 7 50	4 × 7 48	6.3 × 7 59	5 × 7 59	6.3 × 7 68	5 × 7 65
100	101	5 × 7 65	6.3 × 7 77	5 × 7 78	8 × 7 96	6.3 × 7 87	8 × 7 107	6.3 × 7 98
220	221	6.3 × 7 110	8 × 7 130	6.3 × 7 120	8 × 7 145	8 × 7 150		
330	331	8 × 7 165		8 × 7 180				
470	471	8 × 7 240						

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

Rated ripple current (mArms) at 85°C 120Hz

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