

ALUMINUM ELECTROLYTIC CAPACITORS

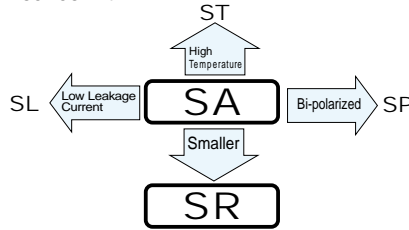
SA 7mmL, For General Purposes series

● Standard miniature series with 7mm height.

● Adapted to the RoHS directive (2002/95/EC).

SR 7mmL, High CV series

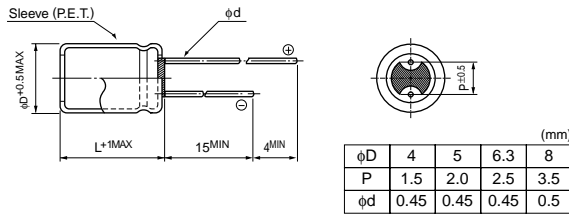
● Higher CV series with 7mm height.



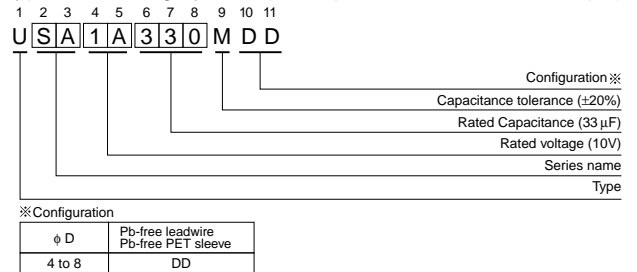
Specifications

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.							
tan δ	Measurement frequency : 120Hz, Temperature : 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
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.		Capacitance change		Within ±20% of initial value			
			tan δ		200% or less of initial specified value			
			Leakage current		Initial specified value or less			
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.							
Marking	Printed with white color letter on black sleeve.							

Radial Lead Type



Type numbering system (Example : SA series : 10V 33μF)



Dimensions

Cap. (μF)	V (Code) Series Code	4 (0G)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)	
		SR	SA	SR	SA	SR	SA	SR	SA	SR	SA	SR	SA	SR	
0.1	0R1													4 × 7	4 × 7
														1.0	1.0
0.22	R22													4 × 7	4 × 7
														2.3	2.3
0.33	R33													4 × 7	4 × 7
														3.5	3.5
0.47	R47													4 × 7	4 × 7
														5.0	5.0
1	010													4 × 7	4 × 7
														10	10
2.2	2R2													4 × 7	4 × 7
														19	19
3.3	3R3													4 × 7	4 × 7
														24	24
4.7	4R7											4 × 7	4 × 7	5 × 7	4 × 7
												24	24	29	28
10	100							4 × 7	4 × 7	5 × 7	4 × 7	5 × 7	4 × 7	6.3 × 7	5 × 7
								28	28	33	28	36	31	44	38
22	220			4 × 7	4 × 7	5 × 7	4 × 7	5 × 7	4 × 7	6.3 × 7	5 × 7	6.3 × 7	5 × 7	8 × 7	6.3 × 7
				34	34	38	35	44	39	51	48	57	52	65	58
33	330	4 × 7	5 × 7	4 × 7	5 × 7	4 × 7	6.3 × 7	5 × 7	6.3 × 7	5 × 7	8 × 7	6.3 × 7	8 × 7	8 × 7	8 × 7
		33	42	40	47	43	57	55	63	58	72	65	85	75	
47	470	4 × 7	5 × 7	4 × 7	6.3 × 7	5 × 7	6.3 × 7	5 × 7	8 × 7	6.3 × 7	8 × 7	8 × 7			
		39	50	48	59	59	68	65	78	71					
100	101	5 × 7	6.3 × 7	5 × 7	8 × 7	6.3 × 7	8 × 7	6.3 × 7	8 × 7	8 × 7					
		65	77	78	96	87	107	98		115					
220	221	6.3 × 7	8 × 7	6.3 × 7	8 × 7	8 × 7	8 × 7								
		110	130	120	145		150								
330	331	8 × 7		8 × 7											
		165		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 (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.