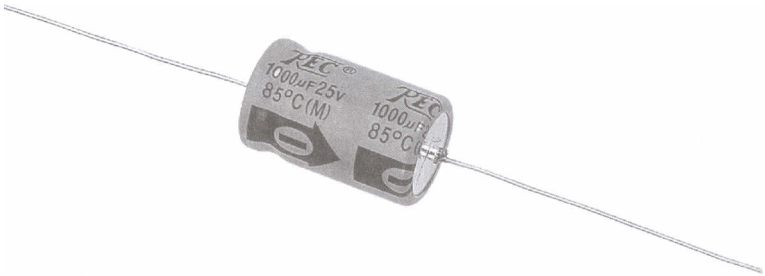
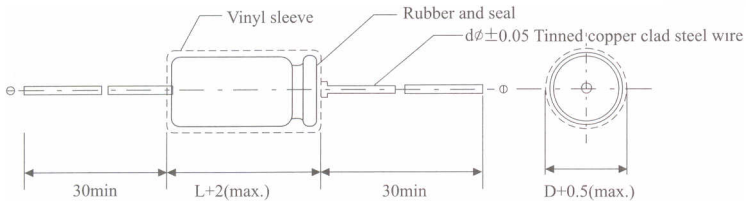
SA SERIES

FEATURES

- *Load life of 2000 hours at 85℃.*
- *High value of CV range.*
- *Standard series for general purpose.*



DIMENSIONS



m/m

D	6	8	10	13	16	18	20	22	25
d	0.6				0.8				

SPECIFICATIONS

Item	Characteristics															
Operation Temperature	-40 ~ +85℃								-25 ~ +85℃							
Rated Working Voltage Range	6.3 ~ 100VDC								160 ~ 450VDC							
Capacitance Tolerance (120Hz,25℃)	±20%(M)															
Leakage Current (25℃)	6.3 ~ 100VDC								160 ~ 450VDC							
	I≤0.01CV or 3 (μA)								I≤0.03CV+10 (μA)							
	I:Leakage Current (μA) C:Rated Capacitance (μF) V:Working Voltage (V)															
	(After 2 minutes applying the DC working voltage)								(After 5 minutes applying the DC working voltage)							
Surge Voltage (25℃)	WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	SV	8	13	20	32	44	50	63	79	125	200	250	300	400	450	500
Dissipation Factor (120Hz,25℃) (tan δ)	WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	tan δ	0.25	0.20	0.17	0.15	0.12	0.12	0.10	0.10	0.10	0.15	0.15	0.15	0.20	0.20	0.20
	For capacitance exceeding 1000 μF, add 0.02 per increment of 1000 μF															
Temperature Characteristics	WV	6.3	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	-25℃/+25℃	4	4	3	3	2	2	2	2	2	3	3	3	6	6	6
	-40℃/+25℃	10	8	6	4	3	3	3	3	3	4	4	4	6	6	6
	Impedance ratio at 120Hz															
Load Test	After 2000 hours application of WV at+85℃,the capacitor shall meet the following limits.															
	Capacitance Change								≤±20% of initial value							
	tan δ								≤150% of initial specified value							
	Leakage Current								≤ initial specified value							
Shelf Test	After 1000 hours, no voltage applied at +85℃,the capacitor shall meet the following limits.															
	Capacitance Change								≤±20% of initial value							
	tan δ								≤150% of initial specified value							
	Leakage Current								≤200% of initial specified value							

DIMENSIONS

D×L(m/m)

μF \ WV	6.3	10	16	25	35	40	50	63	100
0.47						→	6×13	6×13	6×13
1						→	6×13	6×13	6×13
2.2						→	6×13	6×13	6×13
3.3						→	6×13	6×13	6×13
4.7						→	6×13	6×13	6×13
10					6×13	6×13	6×13	6×13	8×16
22		→	6×13	6×13	6×13	6×13	6×13	6×16	8×16
33	→	6×13	6×13	6×13	6×13	8×16	8×16	8×16	8×20
47	→	6×13	6×13	6×13	8×13	8×16	8×16	8×16	10×21
100	→	6×13	6×16	8×16	8×16	8×16	8×16	10×21	13×21
220	→	8×16	8×16	8×16	10×21	10×21	10×21	13×21	16×28
330	→	8×16	8×16	10×21	10×21	13×21	13×21	13×26	16×33
470	8×16	8×16	8×16	10×21	13×21	13×24	13×24	16×26	18×36
1000	10×21	10×21	10×21	13×21	13×24	16×28	16×33	16×33	
2200	13×21	13×21	13×24	16×28	16×33	18×36	18×36	20×42	
3300	13×24	13×24	16×28	16×33	18×36	20×36	20×42	25×42	
4700	16×28	16×28	16×36	18×36	20×36	20×42	25×43	25×54	
10000	16×33	18×36	20×36	22×42	25×54				

μF \ WV	160	200	250	350	400	450
0.47	6×13	8×16	8×16	8×16	8×16	8×16
1	6×13	8×16	8×16	8×16	8×16	8×16
2.2	8×16	8×16	8×16	10×16	10×16	10×16
3.3	8×16	10×16	10×16	10×16	10×21	10×21
4.7	8×16	10×16	10×16	10×21	13×21	13×21
10	10×21	10×21	10×21	13×21	13×24	13×24
22	13×21	13×21	13×24	16×33	16×33	16×33
33	13×21	13×27	16×33	16×33	18×36	18×36
47	13×24	13×33	16×33	16×36	18×36	18×36
100	16×33	18×36	18×36	20×36	22×45	22×46
220	18×36	22×42	22×47	25×57		
330	22×50	25×52	25×57			
470	25×42					

PERMISSIBLE RIPPLE CURRENT

mA(nns)at 120Hz,85˚C

μF \ WV	6.3	10	16	25	35	40	50	63	100
0.47						→	5	5	10
1						→	10	10	19
2.2						→	19	28	29
3.3						→	33	38	38
4.7						→	43	43	48
10				→	57	59	62	67	67
22		→	71	86	90	93	95	100	109
33	→	57	105	105	105	105	105	124	138
47	→	86	124	124	124	124	124	152	171
100	→	171	171	171	200	218	238	257	333
220	→	238	238	295	333	356	380	428	523
330	→	314	333	371	418	447	475	523	665
470	361	380	418	456	523	570	617	713	855
1000	551	599	646	808	855	930	998	1045	
2200	846	874	950	1140	1188	1212	1235	1314	
3300	969	1034	1045	1235	1330	1425	1740	1825	
4700	1112	1140	1292	1425	1635	1795	1864	1976	
10000	1378	1520	1845	1954	2133				

μF \ WV	160	200	250	350	400	450
0.47	9	9	9	10	10	10
1	11	11	11	12	12	12
2.2	18	18	20	20	20	20
3.3	24	24	24	26	26	28
4.7	28	28	30	30	30	33
10	45	45	48	53	53	58
22	76	76	90	93	93	98
33	105	105	109	116	116	124
47	124	124	143	152	152	171
100	204	204	233	247	247	271
220	347	356	380	395		
330	523	570	617			
470	648					