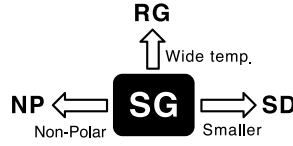


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

SG Standard, For General Purposes Series

S
Solvent Proof
WV ≤ 200V

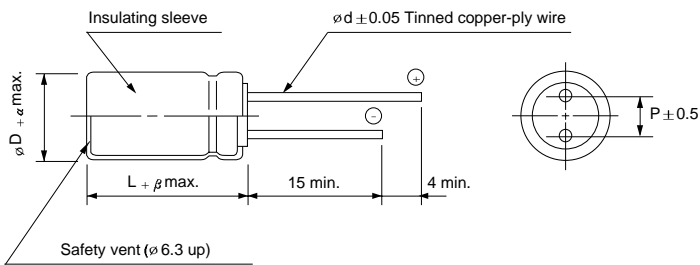
- Standard series for general purposes
- High performance and high reliability
- Load life of 2000 hours at 85°C



Item	Characteristics										
Operating temperature range	WV	6.3~350									
	Temperature range	400, 450 -40 ~ +85°C									
Leakage current max.	WV ≤ 100	WV > 100									
	I = 0.01CV or 3μA whichever is greater (after 2 min) I = 0.03CV or 4μA whichever is greater (after 1 min)										
Capacitance tolerance	±20% at 120Hz, 20°C										
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF : tan δ increases by 0.02 for each 1000μF from below value.										
	WV	6.3	10	16	25	35,40	50	63,80	100	160~250	350~450
Low temperature characteristics (Impedance ratio at 120Hz)	tan δ	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.07	0.15	0.20
	WV	6.3	10	16	25	35~100	160	200~350	400,450		
	Z-25°C/Z+20°C	4	3	2	2	2	4	8	16		
Load life (after application of the rated voltage for 2000 hours at 85°C)	Z-40°C/Z+20°C	10	8	6	4	3	8	12	—		
	Leakage current	Less than specified value									
	Capacitance change	within ±20% of initial value									
Shelf life (at 85°C)	tan δ	Less than 150% of specified value									
	After 1000 hours no load test, leakage current, capacitance and tan δ are same as load life value.										

● DRAWING

Unit : mm



φD	5	6.3	8	10	12.5	16	18	22	25.4
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	12.5
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8	1.0	1.0
β	1.0			2.0					
α	0.5							1.0	

● PERMISSIBLE RIPPLE CURRENT MULTIPLIERS

μF \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz~
~ 47	0.75	1	1.35	1.55	2.0
68 ~ 680	0.80	1	1.25	1.34	1.5
1000 ~	0.85	1	1.10	1.13	1.15

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



SG series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	6.3	10	16	25	35	40	50	63	80	100	160	200	250	350	400	450
0.1							5 ×11 7.2	5 ×11 7.8	5 ×11 7.8	5 ×11 7.8						
0.15							5 ×11 8.9	5 ×11 9.6	5 ×11 9.6	5 ×11 9.6						
0.22							5 ×11 11	5 ×11 12	5 ×11 12	5 ×11 12						
0.33							5 ×11 13	5 ×11 14	5 ×11 14	5 ×11 14						
0.47							5 ×11 16	5 ×11 17	5 ×11 17	5 ×11 17	6.3 ×11 17	6.3 ×11 17	6.3 ×11 17	8 ×11.5 20	8 ×11.5 20	
0.68							5 ×11 19	5 ×11 20	5 ×11 20	5 ×11 20	6.3 ×11 20	6.3 ×11 20	6.3 ×11 20	8 ×11.5 24	8 ×11.5 24	
1.0							5 ×11 23	5 ×11 25	5 ×11 25	5 ×11 25	6.3 ×11 25	6.3 ×11 25	6.3 ×11 25	8 ×11.5 29	8 ×11.5 29	8 ×11.5 26
1.5							5 ×11 28	5 ×11 30	5 ×11 30	5 ×11 30	6.3 ×11 30	6.3 ×11 30	8 ×11.5 36	8 ×11.5 36	10 ×12.5 41	10 ×12.5 37
2.2							5 ×11 34	5 ×11 37	5 ×11 37	5 ×11 37	6.3 ×11 37	6.3 ×11 37	8 ×11.5 43	10 ×12.5 50	10 ×12.5 50	10 ×12.5 45
3.3							5 ×11 42	5 ×11 45	5 ×11 45	5 ×11 45	8 ×11.5 53	8 ×11.5 53	10 ×12.5 61	10 ×12.5 61	10 ×12.5 61	10 ×16 60
4.7							5 ×11 50	5 ×11 54	5 ×11 54	5 ×11 54	8 ×11.5 63	10 ×12.5 73	10 ×12.5 73	10 ×12.5 73	10 ×16 80	10 ×20 78
6.8							5 ×11 60	5 ×11 65	5 ×11 65	5 ×11 65	10 ×12.5 88	10 ×12.5 88	10 ×12.5 88	10 ×16 96	10 ×20 105	10 ×20 94
10							5 ×11 72	5 ×11 78	5 ×11 78	6.3 ×11 90	10 ×12.5 107	10 ×16 117	10 ×16 117	10 ×20 128	12.5 ×20 150	12.5 ×20 134
15							5 ×11 89	5 ×11 96	6.3 ×11 110	6.3 ×11 110	10 ×16 143	10 ×20 156	10 ×20 156	12.5 ×20 183	12.5 ×20 183	12.5 ×25 179
22						5 ×11 101	5 ×11 108	6.3 ×11 133	6.3 ×11 133	8 ×11.5 157	10 ×20 189	10 ×20 189	12.5 ×20 222	12.5 ×20 242	12.5 ×25 242	16 ×25 240
33					5 ×11 123	6.3 ×11 142	6.3 ×11 151	6.3 ×11 163	8 ×11.5 193	10 ×12.5 224	12.5 ×20 272	12.5 ×20 272	12.5 ×25 297	12.5 ×25 297	16 ×25 329	16 ×31.5 322
47				5 ×11 131	6.3 ×11 169	6.3 ×11 169	6.3 ×11 181	8 ×11.5 230	10 ×12.5 267	10 ×16 293	12.5 ×20 325	12.5 ×25 354	16 ×25 393	16 ×25 393	16 ×35.5 451	16 ×35.5 403
68			5 ×11 144	6.3 ×11 182	6.3 ×11 203	8 ×11.5 240	8 ×11.5 256	10 ×12.5 321	10 ×12.5 321	10 ×16 352	12.5 ×25 426	16 ×25 472	16 ×25 472	16 ×35.5 542	18 ×35.5 582	18 ×40 546
100	5 ×11 143	5 ×11 157	6.3 ×11 201	6.3 ×11 220	8 ×11.5 291	8 ×11.5 291	8 ×11.5 311	10 ×12.5 390	10 ×16 427	10 ×20 466	16 ×25 573	16 ×25 573	16 ×31.5 627	18 ×40 741	22 ×40 815	22 ×40 729
150	6.3 ×11 201	6.3 ×11 220	6.3 ×11 246	8 ×11.5 318	10 ×12.5 414	10 ×12.5 414	10 ×16 484	10 ×16 523	10 ×20 571	12.5 ×20 670	16 ×31.5 768	16 ×35.5 806	18 ×35.5 864	22 ×40 998	25.4 ×40 1090	25.4 ×50 1064
220	6.3 ×11 244	6.3 ×11 267	8 ×11.5 352	8 ×11.5 386	10 ×12.5 501	10 ×16 549	10 ×16 586	10 ×20 691	12.5 ×20 811	12.5 ×25 885	18 ×35.5 1047	18 ×40 1098	22 ×40 1209	25.4 ×50 1440		
330	6.3 ×11 298	8 ×11.5 386	8 ×11.5 431	10 ×12.5 549	10 ×16 672	10 ×20 733	10 ×20 784	12.5 ×20 994	12.5 ×25 1083	16 ×25 1202	22 ×40 1481	22 ×40 1481	25.4 ×40 1617			
470	8 ×11.5 420	8 ×11.5 460	10 ×12.5 598	10 ×16 717	10 ×20 875	12.5 ×20 1027	12.5 ×20 1098	12.5 ×25 1293	16 ×25 1434	16 ×31.5 1569	25.4 ×40 1930	25.4 ×40 1930	25.4 ×50 2105			
680	10 ×12.5 587	10 ×12.5 643	10 ×20 859	10 ×20 941	12.5 ×20 1235	12.5 ×20 1235	12.5 ×25 1440	16 ×25 1725	16 ×31.5 1888	18 ×35.5 2125	25.4 ×50 2532					
1000	10 ×12.5 712	10 ×16 854	10 ×20 1042	12.5 ×20 1340	12.5 ×25 1633	16 ×25 1812	16 ×25 1937	16 ×31.5 2289	18 ×35.5 2577	22 ×40 2976						
1500	10 ×20 988	12.5 ×20 1259	12.5 ×20 1387	12.5 ×25 1633	16 ×25 1985	16 ×31.5 2172	16 ×35.5 2402	18 ×35.5 2733	22 ×40 3157	25.4 ×40 3448						
2200	12.5 ×20 1340	12.5 ×20 1442	12.5 ×25 1713	16 ×25 2032	16 ×31.5 2401	16 ×35.5 2519	18 ×35.5 2823	22 ×40 3420	25.4 ×40 3735							
3300	12.5 ×20 1571	12.5 ×25 1831	16 ×25 2194	16 ×31.5 2546	18 ×35.5 3065	18 ×35.5 3065	22 ×40 3673	25.4 ×40 4176								
4700	16 ×25 2179	16 ×25 2317	16 ×31.5 2718	18 ×35.5 3225	22 ×40 3951	22 ×40 3951	25.4 ×40 4458									
6800	16 ×25 2440	16 ×31.5 2814	18 ×35.5 3360	22 ×40 4053	25.4 ×40 4643	25.4 ×50 5065										
10000	16 ×31.5 2955	18 ×35.5 3475	22 ×40 4209	25.4 ×40 4759												
15000	18 ×35.5 3605	22 ×40 4306	25.4 ×40 4877													
22000	22 ×40 4415	25.4 ×40 4947														

Case size $\varnothing D \times L$ (mm)
Ripple current (mA rms) at 85°C, 120Hz