

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

I14008 (SAII)

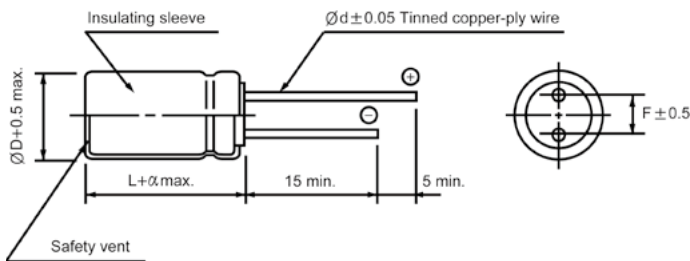
Standard, For General Purposes Series

- Standard series for general purposes
- High voltage, high capacitance series
- Voltage range of 6.3~500V
- Complied to the RoHS directive

Items	Performance characteristics										
Operating temperature range	-40 ~ +85°C (6.3V~450V); -25 ~ +85°C (500V)										
Leakage current max.	WV ≤ 100						WV > 100				
	I = 0.01CV or 3μA whichever is greater (after 2 minutes) I = 0.03CV or 4μA whichever is greater (after 1 minute)						I = 0.02CV + 15μA (after 5 minutes)				
Capacitance tolerance	±20% at 120Hz, 20°C										
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF: tanδ increases by 0.02 for each 1000μF from below value.										
	WV	6.3	10	16	25	35	50	63	100	160~250	350~500
	Tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.20
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3	10	16	25	35	50~100	160	200~350	400~450	500
	Z-25°C / Z+20°C	5	4	3	2	2	2	4	6	10	12
	Z-40°C / Z+20°C	12	10	8	5	4	3	6	8	12	-
Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current						Less than specified value				
	Capacitance change						Within ±20% of initial value				
	Tanδ						Less than 200% of specified value				
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.										

● DRAWING

Unit : mm



ΦD	5	6.3	8	10	12.5	16	18	22
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0
Φd	0.5		0.6		0.8			
α	1.5		2.0			3.0		

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	Frequency		60Hz	120Hz	1kHz	10kHz	50kHz	100kHz≤
	μF							
6.3 ~ 100	~ 47		0.75	1.00	1.55	2.00	2.00	2.00
	68 ~ 680		0.80	1.00	1.35	1.50	1.62	1.75
	1000 ~		0.85	1.00	1.15	1.15	1.32	1.50
160 ~ 500	~ 220		0.80	1.00	1.40	1.60	1.70	1.80
	330 ~		0.90	1.00	1.13	1.15	1.32	1.50

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● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	6.3		10		16		25		35	
	47									5×11
68							5×11	144	6.3×11	182
100					5×11	162	5×11	181	6.3×11	220
150					5×11	198	6.3×11	246	8×11.5	318
220	5×11	201	5×11	218	6.3×11	276	6.3×11	327	8×11.5	386
330	6.3×11	283	6.3×11	307	6.3×11	359	8×11.5	431	10×12.5	549
470	6.3×11	338	6.3×11	366	8×11.5	476	10×12.5	550	10×16	740
680	8×11.5	480	8×11.5	520	8×11.5	600	10×16	754	10×20	947
1000	8×11.5	581	10×12.5	659	10×12.5	796	10×16	942	12.5×20	1306
2200	10×16	983	10×16	1051	10×20	1331	12.5×20	1542	16×25	2032
3300	10×20	1286	12.5×20	1545	12.5×20	1686	16×25	2194	16×31.5	2502
4700	12.5×20	1736	12.5×25	1903	12.5×25	2129	16×25	2448	16×35.5	2905
6800	12.5×25	2129	16×25	2332	16×25	2577	18×31.5	3114	18×40	3408
10000	16×25	2629	16×31.5	2830	16×31.5	3176	18×40	3544		
15000	16×35.5	2959	16×35.5	3284	18×35.5	3656				
22000	18×40	3733	18×40	3843	22×40	4012				

WV μF	50		63		100		160		200	
	1.0	5×11	21	5×11	23	5×11	23			
2.2	5×11	32	5×11	34	5×11	34				
3.3	5×11	39	5×11	42	5×11	42	6.3×11	45	6.3×11	45
4.7	5×11	46	5×11	50	5×11	50	6.3×11	53	6.3×11	57
6.8	5×11	56	5×11	60	5×11	60	8×11.5	76	8×11.5	76
10	5×11	68	5×11	72	5×11	76	8×11.5	96	8×11.5	96
22	5×11	101	5×11	108	6.3×11	124	10×12.5	156	10×16	173
33	5×11	123	6.3×11	151	8×11.5	178	10×16	209	10×20	232
47	6.3×11	169	6.3×11	181	8×11.5	222	10×20	293	10×20	293
68	6.3×11	203	8×11.5	256	10×12.5	293	12.5×20	391	12.5×25	426
100	8×11.5	291	8×11.5	311	10×16	388	12.5×25	516	16×25	516
150	10×12.5	414	10×12.5	422	10×20	528	16×20	632	16×25	691
220	10×12.5	501	10×16	586	12.5×20	737	16×25	873	18×31.5	962
330	10×16	672	10×20	784	12.5×25	1002	16×35.5	1152	18×35.5	1206
470	10×20	875	12.5×20	1098	16×25	1328	18×40	1434	22×40	1495
680	12.5×20	1235	12.5×25	1440	16×31.5	1643	22×40	1831		
1000	12.5×25	1633	16×25	1937	18×31.5	1965				
2200	16×31.5	2220	18×31.5	2445						
3300	18×31.5	2765	18×40	2987						
4700	18×40	3272								

Ripple current (mA rms) at 85°C, 120Hz
 Case size ΦD×L(mm)

WV μF	250		350		400		450		500	
	1.0							8×11.5	26	
2.2							8×11.5	33		
3.3	6.3×11	48	8×11.5	53	8×11.5	56	8×11.5	50		
4.7	6.3×11	57	8×11.5	66	10×12.5	73	10×12.5	72	10×16	69
6.8	8×11.5	76	10×12.5	88	10×12.5	87	10×16	86	10×16	76
10	10×12.5	107	10×12.5	107	10×16	115	10×20	115	12.5×25	178
22	10×16	170	12.5×20	222	12.5×20	218	12.5×25	217	16×25	265
33	10×20	247	16×20	297	12.5×25	296	16×25	294	16×31.5	310
47	12.5×20	319	16×20	353	16×25	387	16×31.5	384	18×31.5	412
68	16×20	425	16×25	465	16×31.5	488	16×35.5	503	18×35.5	457
100	16×25	564	18×31.5	592	18×35.5	667	18×40	546		
150	16×31.5	726	18×40	845	18×40	863	22×45	1283		
220	18×35.5	988	22×40	1112	22×45	1183				
330	22×40	1495								