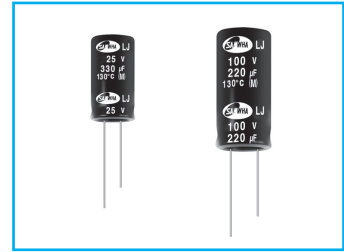


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



130°C, Long Life, Low Impedance Series

I Z **I** Low Impedance
M Miniaturized
S Solvent Proof
 WV ≤ 100V

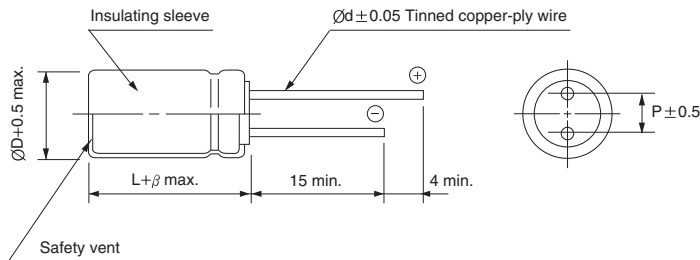


- For LED Lighting, LED Display
- High reliability withstanding 4000 hours load life at 130°C
- Complied to the RoHS directive

Item	Characteristics										
Operating temperature range	-40 ~ +130°C(10 ~ 100WV), -25 ~ +130°C(200, 400WV)										
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.)	I = 0.02CV + 15μA (after 5 min.)									
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	10	16	25	35	50	63	100	200	400	
tanδ	0.19	0.16	0.14	0.12	0.1	0.09	0.08	0.15	0.2		
Low temperature characteristics (Impedance ratio at 120Hz)	WV	10	16	25	35	50	63	100	200	400	
	Z-25°C/Z+20°C	3	2	2	2	2	2	2	3	6	
	Z-40°C/Z+20°C	6	4	3	3	3	3	3	-	-	
Load life (after application of the rated voltage for 4000 hours at 130°C)	Rated voltage (Vdc)	10 ~ 100WV					200, 400WV				
	Capacitance change	Within ±30% of initial value					Within ±20% of initial value				
	tanδ	Within ±300% of initial value					Within ±200% of initial value				
	Leakage current	Less than specified value									
	∅D	Life time(hrs)									
		~100V					200, 400V				
∅D = 6.3					-						
∅D = 8,10					3,000						
∅D ≥ 12.5					4,000						
Shelf life (at 130°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4										

● DRAWING

Unit : mm



∅D	8	10	12.5	16	18
P	3.5	5.0	5.0	7.5	7.5
∅d	0.6	0.6	0.6	0.8	0.8
β	1.5				

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	μF	Frequency				
		120Hz	1kHz	10kHz	50kHz	100kHz ≤
10~100	~ 4.7	0.42	0.60	0.80	0.90	1.00
	10 ~ 33	0.55	0.75	0.90	0.95	1.00
	47 ~ 330	0.70	0.85	0.95	0.98	1.00
	470 ~ 1500	0.75	0.90	0.98	1.00	1.00
	2200 ~	0.80	0.95	1.00	1.00	1.00
200, 400	~ 5.6	0.20	0.40	0.80	0.90	1.00
	6.8 ~ 15	0.30	0.60	0.90	0.95	1.00
	22 ~	0.50	0.80	0.90	0.95	1.00

LJ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	10			16			25			35			50				
	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz		
4.7															8 × 11.5	1.000	100
10															8 × 11.5	0.800	200
22															8 × 11.5	0.800	260
33															8 × 11.5	0.600	300
47															8 × 11.5	0.600	300
100												8 × 11.5	0.220	360	10 × 12.5	0.180	520
220							8 × 11.5	0.220	360	10 × 12.5	0.150	620	10 × 20	0.082	890		
330	8 × 11.5	0.220	360	8 × 11.5	0.220	360	10 × 12.5	0.150	620	10 × 16	0.100	800	12.5 × 20	0.065	1000		
470	10 × 12.5	0.150	620	10 × 12.5	0.150	620	10 × 16	0.100	800	10 × 20	0.073	960	12.5 × 25	0.051	1200		
1000	10 × 20	0.070	960	10 × 20	0.070	960	12.5 × 20	0.060	1100	12.5 × 25	0.040	1430	16 × 31.5	0.037	2180		
2200	12.5 × 25	0.040	1430	12.5 × 25	0.040	1430	16 × 31.5	0.034	2300	16 × 35.5	0.031	2550	18 × 40	0.029	2800		
3300	16 × 25	0.038	1900	16 × 31.5	0.034	2300	16 × 35.5	0.031	2550	18 × 35.5	0.028	2800					
4700	16 × 31.5	0.034	2300	16 × 35.5	0.031	2550											

WV Item μF	63			100			200		400	
	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	Ripple current (mA rms) 130°C 100kHz	ØD×L (mm)	Ripple current (mA rms) 130°C 100kHz
1.0									8 × 11.5	65
1.5									8 × 11.5	75
									8 × 15	80
1.8									8 × 11.5	75
									8 × 15	85
2.2									8 × 11.5	75
									8 × 15	90
									8 × 20	110
2.7									8 × 15	95
									8 × 20	115
3.3									8 × 20	120
									8 × 20	120
4.7				8 × 11.5	1.300	100	8 × 11.5	120	10 × 16	125
									8 × 20	130
5.6							8 × 11.5	130	10 × 20	145
							8 × 15	180	10 × 20	150
6.8							8 × 11.5	130		
							8 × 15	180		
10				8 × 11.5	1.000	200	8 × 15	200		
							8 × 20	240		
15							8 × 15	200		
							8 × 20	240		
22				8 × 11.5	1.000	220	8 × 20	240		
							10 × 16	240		
33	8 × 11.5	0.500	250	10 × 12.5	0.670	260	10 × 20	320		
47	10 × 12.5	0.370	400	10 × 16	0.330	330				
100	10 × 16	0.300	450	12.5 × 20	0.170	670				
220	12.5 × 20	0.120	820	16 × 25	0.130	1100				
330	12.5 × 25	0.102	1000	16 × 31.5	0.100	1300				
470	16 × 25	0.089	1500	18 × 31.5	0.092	1600				
1000	16 × 31.5	0.076	1850							
1500	18 × 40	0.063	2350							