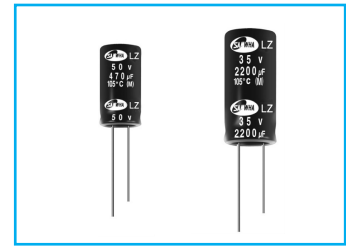


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

LZ High ripple current, Long Life Series

LI Low Impedance **LL** Long Life **S** Solvent Proof



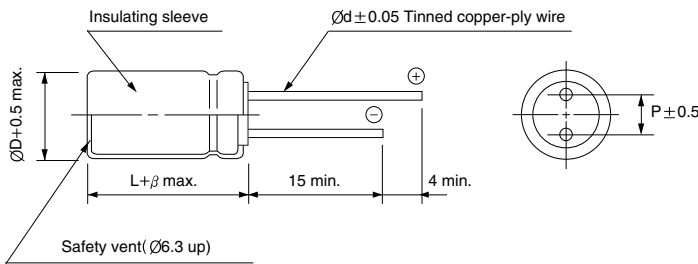
- Operating temperature range of -40 ~ +105°C
- Enabled high ripple current by a reduction of impedance at high frequency range
- High reliability withstanding 10000 hours load life at 105°C (5000/7000 hours for as specified below)
- Complied to the RoHS directive

LK \Rightarrow LZ
Long life

Item	Characteristics													
Operating temperature range	-40 ~ +105°C													
Leakage current max.	I = 0.01CV or 3µA whichever is greater (after 2 minutes) I = 0.03CV or 4µA whichever is greater (after 1 minute)													
Capacitance tolerance	±20% (20°C, 120Hz)													
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000µF : tanδ increases by 0.02 for each 1000µF from below value.													
	<table border="1"> <tr> <td>Rated Voltage(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	tanδ	0.22	0.19	0.16	0.14	0.12
Rated Voltage(V)	6.3	10	16	25	35	50								
tanδ	0.22	0.19	0.16	0.14	0.12	0.10								
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>Z-40°C / Z+20°C</td> <td>Z-25°C / Z+20°C</td> </tr> <tr> <td>3</td> <td>2</td> </tr> </table>	Z-40°C / Z+20°C	Z-25°C / Z+20°C	3	2									
Z-40°C / Z+20°C	Z-25°C / Z+20°C													
3	2													
Load life (after application of the rated voltage for 10000 hours at 105°C)	Leakage current	Less than specified value												
	Capacitance change	Within ±25% of initial value												
	tanδ	Less than 200% of specified value												
Shelf life (at 105°C)	<table border="1"> <tr> <td>∅D</td> <td>∅D = 5, 6.3</td> <td>∅D = 8</td> <td>∅D ≥ 10</td> </tr> <tr> <td>Life time</td> <td>6000 hours</td> <td>8000 hours</td> <td>10000 hours</td> </tr> </table>	∅D	∅D = 5, 6.3	∅D = 8	∅D ≥ 10	Life time	6000 hours	8000 hours	10000 hours	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.				
	∅D	∅D = 5, 6.3	∅D = 8	∅D ≥ 10										
Life time	6000 hours	8000 hours	10000 hours											

● DRAWING

Unit : mm



∅D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
∅d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5			2.0			

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

µF \ Frequency(Hz)	120	1k	10k	100k ≤
~ 33	0.32	0.60	0.80	1.00
39 ~ 270	0.40	0.63	0.82	1.00
330 ~ 680	0.45	0.67	0.84	1.00
820 ~ 1800	0.50	0.70	0.86	1.00
2200 ~ 8200	0.60	0.75	0.88	1.00

LZ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16		
	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
47	5 × 11	0.600	300	5 × 11	0.600	300	5 × 11	0.600	300
100	5 × 11	0.600	345	5 × 11	0.600	345	6.3 × 11	0.300	345
150	6.3 × 11	0.300	345	6.3 × 11	0.300	345	6.3 × 11	0.300	540
220	6.3 × 11	0.300	345	6.3 × 11	0.300	345	8 × 11.5	0.200	540
330	6.3 × 11	0.300	540	8 × 11.5	0.200	540	8 × 11.5	0.140	945
470	8 × 11.5	0.140	540	8 × 11.5	0.140	540	10 × 12.5	0.105	945
680	10 × 12.5	0.105	945	10 × 12.5	0.105	945	8 × 20	0.105	945
820	10 × 12.5	0.105	945	10 × 16	0.075	945	10 × 16	0.075	1250
1000	10 × 16	0.075	1250	8 × 20	0.105	945	10 × 20	0.054	1760
1200	10 × 16	0.075	1500	10 × 16	0.075	1250	8 × 20	0.075	1250
1500	10 × 20	0.054	1760	10 × 16	0.075	1760	10 × 20	0.054	1760
1800	10 × 20	0.054	1760	10 × 20	0.054	1760	10 × 20	0.054	1960
2200	12.5 × 20	0.050	1960	10 × 20	0.054	1760	12.5 × 20	0.050	1960
2700	12.5 × 20	0.050	2250	12.5 × 20	0.050	1960	12.5 × 25	0.040	2480
3300	12.5 × 20	0.050	2480	12.5 × 25	0.040	2250	12.5 × 25	0.040	2900
3900	12.5 × 25	0.040	2480	12.5 × 25	0.040	2480	16 × 25	0.030	3250
4700	16 × 25	0.030	3250	16 × 25	0.030	2480	16 × 25	0.030	3570
5600	16 × 25	0.030	3570	16 × 25	0.030	3250	16 × 31.5	0.027	3630
6800	16 × 25	0.030	3630	16 × 31.5	0.027	3570			
8200	16 × 31.5	0.027	3700	18 × 35.5	0.025	3630			

WV Item μF	25			35			50		
	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
22							5 × 11	1.800	240
47				6.3 × 11	0.300	345			
56				6.3 × 11	0.300	345	6.3 × 11	0.700	385
68	6.3 × 11	0.300	345	6.3 × 11	0.300	345			
100	6.3 × 11	0.300	345	8 × 11.5	0.250	345	8 × 11.5	0.300	724
120	6.3 × 11	0.300	345	8 × 11.5	0.200	345	8 × 11.5	0.200	950
150	8 × 11.5	0.250	345	8 × 11.5	0.160	945	10 × 12.5	0.120	979
180	8 × 11.5	0.200	345	8 × 11.5	0.140	945	8 × 20	0.120	1200
220	8 × 11.5	0.160	345	10 × 12.5	0.105	945	10 × 12.5	0.120	1190
270	10 × 12.5	0.105	945	10 × 12.5	0.105	945	8 × 20	0.120	1370
330	10 × 12.5	0.105	945	8 × 15	0.120	945	10 × 16	0.075	1370
390	8 × 15	0.105	1250	10 × 16	0.075	1250	10 × 20	0.064	1580
470	10 × 16	0.075	1330	10 × 16	0.075	1330	10 × 20	0.064	1870
560	8 × 20	0.054	1500	10 × 20	0.054	1500	10 × 20	0.064	2050
680	10 × 20	0.054	1760	8 × 20	0.085	1430	12.5 × 20	0.050	2050
820	12.5 × 20	0.050	1960	10 × 20	0.054	1760	10 × 20	0.064	2050
1000	12.5 × 20	0.050	2250	12.5 × 20	0.050	1960	12.5 × 25	0.040	2410
1200	12.5 × 20	0.050	2480	12.5 × 25	0.040	2250	12.5 × 25	0.040	2410
1500	16 × 20	0.040	2480	12.5 × 25	0.040	2250	16 × 20	0.040	2730
1800	16 × 20	0.040	2900	16 × 20	0.040	2900	16 × 25	0.036	3010
2200	16 × 25	0.030	3250	16 × 25	0.030	3250			
2700	16 × 25	0.030	3570	16 × 31.5	0.027	3630			
3300	16 × 31.5	0.027	3630						