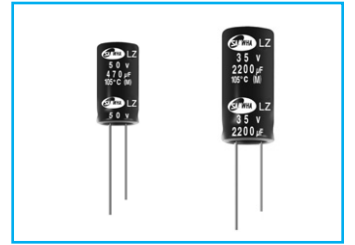
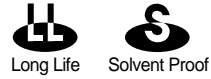


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



High ripple current, Long Life Series



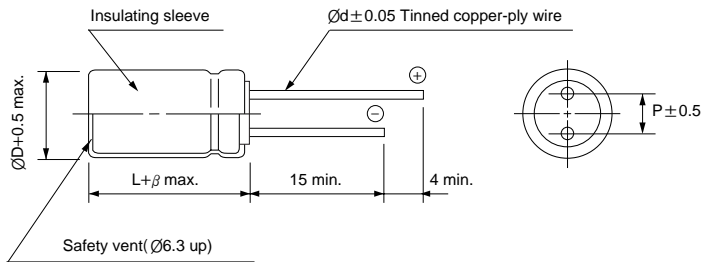
- Operating temperature range of -40 ~ +105°C
- Enabled high ripple current by a reduction of impedance at high frequency range
- High reliability withstanding 10000 hours load life at 105°C (5000/7000 hours for as specified below)
- Complied to the RoHS directive



Item	Characteristics													
Operating temperature range	-40 ~ +105°C													
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 1 minute) I = 0.03CV or 4μA whichever is greater (after 2 minutes)													
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)	Z-40°C / Z+20°C													
	Z-25°C / Z+20°C													
Load life (after application of the rated voltage for 10000 hours at 105°C)	Leakage current													
	Capacitance change													
	tanδ													
	<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					
∅D	∅D = 5, 6.3	∅D = 8	∅D ≥ 10											
Life time	6000 hours	8000 hours	10000 hours											
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.													

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

MINIATURE TYPES

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

LZ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16		
	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing\text{D} \times \text{L}$ (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	0.140	540
330	6.3×11	0.300	540	8×11.5	0.140	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	10×16	0.075	1250
820	10×12.5	0.105	945	10×16	0.075	945	10×20	0.054	1760
1000	10×16	0.075	1250	10×16	0.075	1250	10×20	0.054	1760
1200	10×16	0.075	1500	10×16	0.075	1760	10×20	0.054	1960
1500	10×20	0.054	1760	10×20	0.054	1760	12.5×20	0.500	1960
1800	10×20	0.054	1760	10×20	0.054	1760	12.5×20	0.500	2250
2200	12.5×20	0.500	1960	12.5×20	0.048	1960	12.5×25	0.040	2480
2700	12.5×20	0.500	2250	12.5×25	0.040	2250	12.5×25	0.040	2900
3300	12.5×20	0.500	2480	12.5×25	0.040	2480	16×25	0.030	3250
3900	12.5×25	0.040	2480	16×25	0.030	2480	16×25	0.030	3570
4700	16×25	0.030	3250	16×25	0.030	3250	16×31.5	0.027	3630
5600	16×25	0.030	3570	16×25	0.030	3570			
6800	16×25	0.030	3630	16×31.5	0.027	3630			
8200	16×31.5	0.027	3700	18×35.5	0.025	3700			

WV Item μF	25			35			50		
	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
22							5×11	0.600	240
47				6.3×11	0.300	345			
56				6.3×11	0.300	345	6.3×11	0.340	385
68	6.3×11	0.300	345	6.3×11	0.300	345			
100	6.3×11	0.300	345	8×11.5	0.140	345	8×11.5	0.140	724
120	6.3×11	0.300	345	8×11.5	0.140	345	8×11.5	0.140	950
150	8×11.5	0.140	345	8×11.5	0.140	945	10×12.5	0.120	979
180	8×11.5	0.140	345	8×11.5	0.140	945	10×12.5	0.120	1190
220	8×11.5	0.140	345	10×12.5	0.105	945	10×16	0.075	1370
270	10×12.5	0.105	945	10×16	0.075	1250	10×20	0.064	1580
330	10×12.5	0.105	945	10×16	0.075	1330	10×20	0.064	1870
390	10×12.5	0.105	1250	10×20	0.054	1500	10×20	0.064	2050
470	10×16	0.075	1330	10×20	0.054	1760	12.5×20	0.050	2050
560	10×20	0.054	1500	12.5×20	0.500	1960	12.5×25	0.040	2410
680	10×20	0.054	1760	12.5×20	0.500	2250	12.5×25	0.040	2410
820	12.5×20	0.500	1960	12.5×25	0.040	2250	16×20	0.040	2730
1000	12.5×20	0.500	2250	12.5×25	0.040	2480	16×25	0.036	3010
1200	12.5×20	0.500	2480	16×20	0.040	2900			
1500	16×20	0.040	2480	16×25	0.030	3250			
1800	16×20	0.040	2900	16×25	0.030	3570			
2200	16×25	0.030	3250	16×31.5	0.027	3630			
2700	16×25	0.030	3570						
3300	16×31.5	0.027	3630						