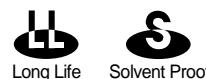


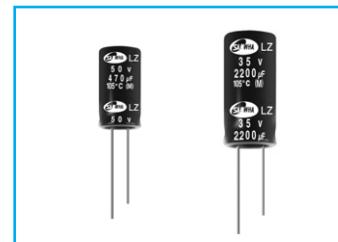
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



High ripple current, Long Life Series



LK → LZ
Long life

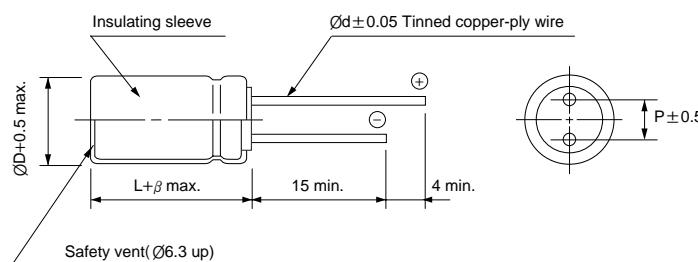


- Operating temperature range of -40 ~ +105°C
- Enabled high ripple current by a reduction of impedance at high frequency range
- High reliability withstanding 10000 hours load life at 105°C (5000/7000 hours for as specified below)
- Complied to the RoHS directive

Item	Characteristics										
Operating temperature range	-40 ~ +105°C										
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 1 minute) $I = 0.03CV$ or $4\mu A$ whichever is greater (after 2 minutes)										
Capacitance tolerance	$\pm 20\%$ (20°C, 120Hz)										
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > $1000\mu F$: $\tan\delta$ increases by 0.02 for each $1000\mu F$ from below value.										
	Rated Voltage(V)	6.3	10	16	25	35	50				
	$\tan\delta$	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							
	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 $\pm 25\%$ of initial value									
	$\tan\delta$	Less than 200% of specified value									
	$\emptyset D$	$\emptyset D = 5, 6.3$		$\emptyset D = 8$	$\emptyset D \geq 10$						
	Life time	6000 hours		8000 hours	10000 hours						
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.										

DRAWING

Unit : mm



$\emptyset D$	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
$\emptyset d$	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 \leq
~ 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 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	10×12.5	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						