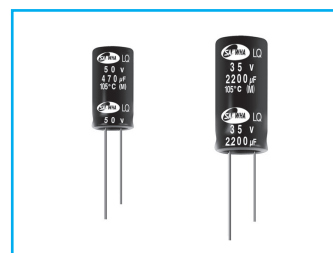


LQ

Low Imp., High Ripple Current Series

Low Impedance
 Miniaturized
 Solvent Proof

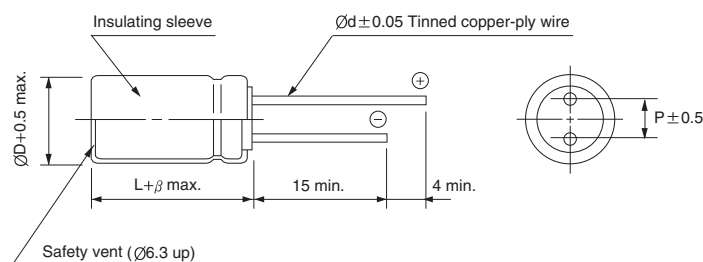
- For LED Lighting
- High reliability withstanding 10000 hours load life at 105°C (6000 ~ 9000 hours for smaller case sizes as specified below)
- Complied to the RoHS directive



Item	Characteristics										
Operating temperature range	-40 ~ +105°C										
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 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	80	100	120
	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08	0.08
Low temperature characteristics (Impedance ratio at 120Hz)	Z-25°C / Z+20°C						2				
	Z-40°C / Z+20°C						3				
Load life	After an application of DC bias voltage plus the rated AC ripple current for 10000 hours at 105°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.										
	Rated voltage (Vdc)		6.3 ~ 10				16 ~ 120				
	Capacitance change		Within ±30% of initial value				Within ±25% of initial value				
	tanδ		Less than 200% of specified value								
	Leakage current		Less than specified value								
	ØD		Life time (hrs)								
			6.3Vdc		10 ~ 50Vdc			63 ~ 120Vdc			
	Ø5 ~ Ø6.3		6000		7000			6000			
	Ø8×11.5L		8000		9000			8000			
	Ø8×15L ~ 20L		9000		10000			9000			
Ø10×12.5L		9000									
Ø10×16L ~ 25L		10000									
Ø12.5 ~											
Shelf life (at 105°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



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

MINIATURE TYPES

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

μF \ Frequency	120Hz	1kHz	10kHz	50kHz	100kHz $\leq$
~ 33	0.42	0.70	0.90	0.95	1.00
47 ~ 270	0.50	0.73	0.92	0.96	1.00
330 ~ 680	0.55	0.77	0.94	0.97	1.00
820 ~ 1800	0.60	0.80	0.96	0.98	1.00
2200 ~	0.70	0.85	0.98	0.99	1.00

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

LQ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16			25			35		
	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
100										5×11	0.400	450	6.3×11	0.170	700
120							5×11	0.400	450						
150				5×11	0.400	450				6.3×11	0.170	700			
180													8×11.5	0.075	1200
220	5×11	0.400	345										8×15	0.065	1600
270													10×12.5	0.053	1700
330				6.3×11	0.170	700				8×11.5	0.090	1200	8×20	0.041	1960
390										8×15	0.065	1600	10×16	0.038	2000
470	6.3×11	0.170	540							10×12.5	0.053	1700	10×16	0.038	2100
560				8×11.5	0.110	1200	8×15	0.059	1600	8×20	0.041	1960	10×20	0.030	2500
680				8×15	0.059	1600	10×12.5	0.053	1700	10×16	0.039	2000	10×25	0.027	2900
820	8×11.5	0.075	945	10×12.5	0.053	1700	8×20	0.041	1960				12.5×20	0.025	2600
1000	8×15	0.059	1250	10×16	0.041	1960	10×16	0.036	2000	10×20	0.030	2500	12.5×20	0.025	2800
1200	10×12.5	0.053	1500	10×16	0.036	2000				10×25	0.028	2900	12.5×25	0.022	3200
1500	8×20	0.041	1500				10×20	0.027	2500	12.5×20	0.026	2600	12.5×30	0.018	3660
1800	10×16	0.036	1760	10×20	0.027	2500	10×25	0.024	2600	12.5×25	0.024	3200	16×20	0.021	3330
2200				10×25	0.027	2900	12.5×20	0.023	2900	12.5×30	0.017	3660	16×25	0.017	3810
2700	10×20	0.027	1960	10×20	0.024	2600	12.5×25	0.018	3200	16×20	0.020	3330			
3300	10×25	0.023	2250	12.5×25	0.018	3200	12.5×30	0.017	3660	12.5×34.5	0.015	4120			
3900	12.5×20	0.024	2480				16×20	0.020	3300	16×25	0.016	3810			
4700	12.5×25	0.018	2900	12.5×30	0.018	3660	12.5×34.5	0.015	4120						
5600	12.5×30	0.017	3450	16×25	0.016	3810	16×25	0.016	3810						
6800	12.5×34.5	0.015	3570												
8200	16×20	0.020	3250												
	16×25	0.016	3630												

WV Item μF	50			63			80			100			120		
	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	IMP. (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
27	5×11	0.480	310				6.3×11	0.460	370				8×11.5	0.450	620
33										8×15	0.350	780	8×15	0.200	780
47	6.3×11	0.380	400	6.3×11	0.350	420	8×11.5	0.290	620	10×12.5	0.250	780	8×20	0.160	1040
56	6.3×11	0.220	500				8×15	0.200	780	10×12.5	0.250	780	10×16	0.110	1040
68							10×12.5	0.170	780	8×20	0.250	1040	10×20	0.084	1430
82				8×11.5	0.240	720	8×20	0.160	1040	10×16	0.130	1040	12.5×16	0.110	1430
100	8×11.5	0.120	950	8×15	0.180	990	10×16	0.140	1040	10×20	0.105	1430	10×25	0.069	1620
120	8×15	0.082	1230	10×12.5	0.110	990				12.5×16	0.105	1430	12.5×20	0.062	1750
150	10×12.5	0.073	1280	8×20	0.096	1200	10×20	0.084	1430	10×25	0.075	1620	12.5×25	0.047	2210
180	8×20	0.065	1580	10×16	0.076	1200	12.5×16	0.110	1430	12.5×20	0.070	1750	12.5×30	0.042	2400
220	10×16	0.050	1650				10×25	0.069	1620				16×20	0.048	1950
270							12.5×20	0.062	1750	12.5×25	0.060	2210			
330	10×20	0.036	2060	10×25	0.060	1990	12.5×25	0.047	2210	12.5×30	0.040	2400	16×25	0.038	2430
390							16×20	0.048	1950	16×20	0.046	1950	18×25	0.036	2500
470	12.5×20	0.030	2300	12.5×20	0.050	1990	12.5×30	0.042	2400	12.5×34.5	0.038	2600	16×35.5	0.029	2860
560							16×20	0.045	2270	12.5×40	0.030	2860	16×40	0.027	3510
680	12.5×25	0.024	2800	12.5×30	0.035	2760	12.5×34.5	0.036	2860	16×25	0.036	2430	18×31.5	0.030	2860
820	12.5×30	0.022	3370	16×20	0.032	2380	16×31.5	0.032	2640	16×35.5	0.028	2860	18×40	0.026	3860
1000	12.5×34.5	0.020	3810	16×25	0.025	2890	16×35.5	0.029	2860	18×31.5	0.029	2860			
1200	16×25	0.021	3510				18×25	0.034	2500	18×40	0.025	3860			
2200				18×40	0.020	3200	18×35.5	0.027	3510						
							18×40	0.026	3860						