



# LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS LSW

## LSW SERIES

### 105°C Standard, Screw Terminal Type

#### ◆ FEATURES

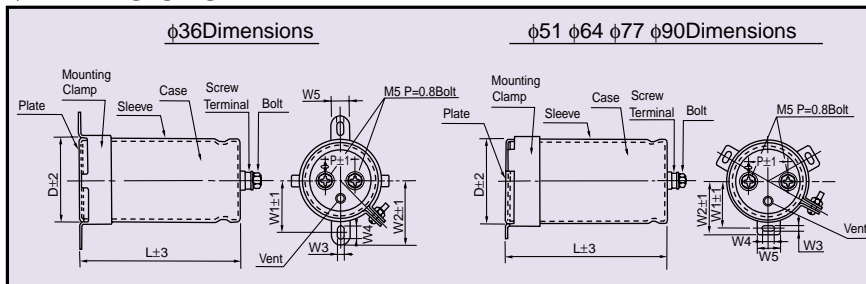
- Load Life : 105°C 3000 hours.



#### ◆ SPECIFICATIONS

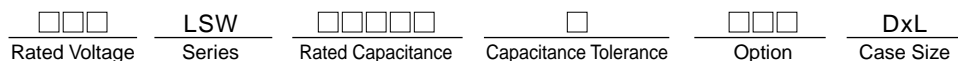
tems	Characteristics																																																																																				
Category Temperature Range	-40~+105°C	-25~+105°C																																																																																			
Rated Voltage Range	10~100V.DC	160~400V.DC																																																																																			
Capacitance Tolerance	±20% (20°C, 120Hz)																																																																																				
Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>WV \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> <th>WV \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> <th rowspan="6">(20°C, 120Hz)</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0.75</td> <td>1.0</td> <td>1.3</td> <td>1.5</td> <td>1.5</td> <td>63</td> <td>0.2</td> <td>0.25</td> <td>0.3</td> <td>0.4</td> <td>0.4</td> </tr> <tr> <td>16</td> <td>0.6</td> <td>0.7</td> <td>0.8</td> <td>1.0</td> <td>1.0</td> <td>80</td> <td>0.2</td> <td>0.2</td> <td>0.25</td> <td>0.3</td> <td>0.3</td> </tr> <tr> <td>25</td> <td>0.4</td> <td>0.5</td> <td>0.7</td> <td>0.8</td> <td>0.8</td> <td>100</td> <td>0.15</td> <td>0.2</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> <tr> <td>35</td> <td>0.3</td> <td>0.5</td> <td>0.6</td> <td>0.7</td> <td>0.7</td> <td>160~250</td> <td>0.15</td> <td>0.15</td> <td>0.2</td> <td>0.2</td> <td>0.2</td> </tr> <tr> <td>50</td> <td>0.25</td> <td>0.3</td> <td>0.5</td> <td>0.6</td> <td>0.6</td> <td>315~400</td> <td>0.2</td> <td>0.2</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> </tbody> </table>												WV \ φD	36	51	64	77	90	WV \ φD	36	51	64	77	90	(20°C, 120Hz)	10	0.75	1.0	1.3	1.5	1.5	63	0.2	0.25	0.3	0.4	0.4	16	0.6	0.7	0.8	1.0	1.0	80	0.2	0.2	0.25	0.3	0.3	25	0.4	0.5	0.7	0.8	0.8	100	0.15	0.2	0.25	0.25	0.25	35	0.3	0.5	0.6	0.7	0.7	160~250	0.15	0.15	0.2	0.2	0.2	50	0.25	0.3	0.5	0.6	0.6	315~400	0.2	0.2	0.25	0.25	0.25
WV \ φD	36	51	64	77	90	WV \ φD	36	51	64	77	90	(20°C, 120Hz)																																																																									
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Leakage Current(MAX)	I=0.02CV or 5mA whichever is smaller. (After 5 minutes application of rated voltage) I=Leakage Current(μA)      V=Rated Voltage(V)      C=Rated Capacitance(μF)																																																																																				
Endurance	After applying rated voltage with rated ripple current for 3000hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±15% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 175% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>												Capacitance Change	Within ±15% of the initial value.	Dissipation Factor	Not more than 175% of the specified value.	Leakage Current	Not more than the specified value.																																																																			
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Shelf Life	After storage for 500 hours with no voltage applied at 105°C, the capacitors shall be subjected to voltage treatment in JIS C 5102. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±15% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 150% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>												Capacitance Change	Within ±15% of the initial value.	Dissipation Factor	Not more than 150% of the specified value.	Leakage Current	Not more than the specified value.																																																																			
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#### ◆ DIMENSIONS



φD	W1	W2	W3	W4	W5	P
36	24.0	30.0	3.5	7	10	12.7
51	32.5	37.5	4.5	6	12	21.8
64	38.0	43.0	4.5	8	14	28.2
77	43.5	49.0	4.5	7	14	31.4
90	50.8	56.0	4.5	8	16	31.4

#### ◆ EXPLANATION OF PART NUMBER





# LARGE CAN TYPE ALUMINUM ELECTROLYTIC CAPACITORS LSW

## ◆ STANDARD SIZE, RATED RIPPLE CURRENT

WV Cap(μF)	10V	16V	25V	35V	50V	63V	80V
3300							36x50 3.0
3900							36x63 3.3
4700						36x50 3.2	36x83 3.6
5600						36x63 3.5	36x83 3.9
6800				36x50 2.5	36x50 3.6	36x63 3.8	36x83 4.3
8200				36x50 2.8	36x63 3.9	36x83 4.3	36x98 5.1
10000				36x50 3.8	36x83 4.2	36x83 4.7	36x118 5.8
12000				36x63 4.3	36x83 5.0	36x98 5.6	51x83 7.0
15000			36x50 4.2	36x83 4.7	36x98 5.5	36x118 6.4	51x83 7.6
18000			36x63 4.6	36x83 5.1	36x98 5.7	51x83 7.5	51x98 7.7
22000		36x50 4.0	36x83 5.2	36x98 6.6	36x118 7.5	51x83 7.5	51x118 9.0
27000	36x50 4.4	36x63 5.0	36x83 5.4	36x118 6.7	51x83 7.5	51x98 8.7	64x99 10.1
33000	36x63 5.5	36x83 5.2	36x98 6.5	51x83 7.1	51x98 9.3	51x118 10.3	64x119 11.6
39000	36x63 6.0	36x83 5.8	36x98 7.5	51x83 8.4	51x98 9.4	64x99 11.2	64x139 13.5
47000	36x83 6.6	36x98 6.8	36x118 8.9	51x98 9.9	51x118 11.7	64x119 12.9	77x101 15.8
56000	36x83 7.5	36x98 6.9	51x83 10.0	51x98 10.3	64x99 12.4	64x139 15.2	77x121 17.0
68000	36x98 7.6	36x118 8.4	51x98 10.7	51x118 11.4	64x119 15.1	77x101 16.0	77x141 20.4
82000	36x118 9.0	51x83 8.4	51x98 12.0	64x99 12.5	77x101 15.5	77x121 17.7	77x151 21.5
100000	51x83 10.2	51x98 11.3	51x118 13.1	64x119 15.5	77x101 16.3	77x141 21.5	90x151 22.3
120000	51x83 11.0	51x98 11.4	64x99 13.7	77x101 15.5	77x121 19.1	90x141 22.4	
150000	51x98 13.4	51x118 12.5	64x119 16.4	77x121 17.9	77x141 23.4		
180000	51x118 14.0	64x99 14.2	77x101 16.7	77x141 20.0	90x141 23.7		
220000	64x99 14.5	64x119 16.6	77x121 20.5	77x151 24.1			
270000	64x119 16.0	77x101 17.5	77x141 21.3	90x141 26.5			
330000	77x101 18.0	77x121 24.3	77x151 26.0				
390000	77x101 19.5	77x141 25.2	90x141 27.2				
470000	77x121 20.0	77x151 26.7					
560000	77x141 24.1	90x141 29.1					
680000	90x141 26.5						

WV Cap(μF)	100V	160V	200V	250V	315V	350V	400V
220						36x50 0.9	36x50 1.0
270					36x50 1.0	36x50 1.0	36x63 1.0
330					36x50 1.2	36x63 1.2	36x63 1.2
390					36x63 1.3	36x83 1.3	36x83 1.4
470				36x50 1.3	36x83 1.5	36x83 1.5	36x98 1.5
560			36x50 1.4	36x63 1.6	36x83 1.6	36x98 1.7	36x98 1.7
680			36x50 1.5	36x83 1.7	36x98 1.9	36x98 1.9	51x83 2.3
820		36x50 1.4	36x83 1.9	36x83 1.9	36x118 2.2	36x118 2.1	51x98 2.4
1000		36x63 1.9	36x83 2.2	36x98 2.3	51x83 2.3	51x98 2.5	51x118 2.7
1200		36x83 2.3	36x83 2.3	36x98 2.4	51x98 2.7	51x98 2.7	51x118 3.0
1500		36x83 2.6	36x98 2.9	36x118 2.9	51x98 3.1	51x118 3.3	64x99 3.5
1800		36x83 2.6	36x98 2.9	36x118 3.0	51x118 3.6	64x99 3.8	64x119 3.6
2200	36x50 2.9	36x98 3.2	36x118 3.3	51x98 3.8	64x99 4.2	64x119 4.6	77x101 4.1
2700	36x63 3.4	36x118 3.2	51x83 3.8	51x118 4.5	64x119 4.3	77x101 4.6	77x121 4.8
3300	36x83 3.9	36x118 3.7	51x98 4.7	64x99 5.2	77x101 4.9	77x121 5.3	77x141 5.7
3900	36x83 4.2	51x98 4.3	51x118 5.4	64x119 5.2	77x121 5.8	77x141 6.2	90x141 6.7
4700	36x83 4.6	51x98 4.8	64x99 6.2	64x119 5.7	77x121 6.3	90x141 7.4	90x141 7.4
5600	36x98 4.9	51x118 5.5	64x99 6.3	77x101 6.4	77x141 7.3	90x141 8.1	
6800	36x118 5.5	64x99 6.3	64x119 7.3	77x121 7.6	90x141 8.9		
8200	51x83 6.2	64x119 7.1	77x101 8.5	77x141 8.3			
10000	51x98 6.7	77x101 7.9	77x121 9.5	90x141 9.9			
12000	51x98 7.3	77x121 9.0	77x141 10.5	90x141 10.8			
15000	51x118 8.6	77x141 11.3	90x141 12.5				
18000	64x99 8.9	90x141 13.0	90x141 13.3				
22000	64x119 10.3	90x141 14.3					
27000	64x139 12.1						
33000	77x121 14.1						
39000	77x141 16.5						
47000	77x141 18.3						
56000	90x141 19.2						
68000	90x151 20.1						

Ripple Current A r.m.s./120Hz-105°C

Case Size φD<sup>2</sup>xL<sup>±3</sup>(mm)

## ◆ MULTIPLIER FOR RIPPLE CURRENT

(1) Temperature coefficient

Ambient Temperature(°C)	105	85	70≥
Coefficient	1.0	1.7	2.0

(2) Frequency coefficient

Frequency(Hz)	60	120	400	1k	10k≤
10~50WV	0.80	1.00	1.03	1.05	1.08
63~100WV	0.80	1.00	1.05	1.07	1.10
160~400WV	0.80	1.00	1.10	1.13	1.18

\*Please notice the following conditions for use.

(1) Maximum screw terminal tightening torque; 33kg·cm or less.

(2) Maximum ripple current shall be 50Arms or less because of the rated current of M5 screw terminal.