

LSQ SERIES

85°C 3000 hours, Screw Terminal Type

◆FEATURES

- Load Life : 85°C 3000 hours.
- RoHS compliance.



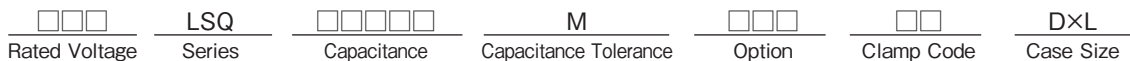
◆SPECIFICATIONS

Items	Characteristics																																																																																								
Category Temperature Range	-40~+85°C	-25~+85°C																																																																																							
Rated Voltage Range	10~100Vdc	160~450Vdc																																																																																							
Capacitance Tolerance	±20% (20°C, 120Hz)																																																																																								
Leakage Current(MAX)	I=0.02CV or 5mA whichever is smaller.(After 5 minutes application of rated voltage) I=Leakage Current(µA) C=Capacitance(µF) V=Rated Voltage(Vdc)																																																																																								
(tanδ) Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Vdc \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> <th>Vdc \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> <th>(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> <td rowspan="6"></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>350~450</td> <td>0.2</td> <td>0.2</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Vdc \ φD	36	51	64	77	90	Vdc \ 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	350~450	0.2	0.2	0.25	0.25	0.25													
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Endurance	<p>After applying rated voltage with rated ripple current for 3000 hours at 85°C, the capacitors shall meet the following requirements.</p> <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	<p>After storage for 500 hours with no voltage applied at 85°C, the capacitors shall be subjected to the voltage treatment in JIS C 5101-4 item 4.1 and shall be meet the following requirements.</p> <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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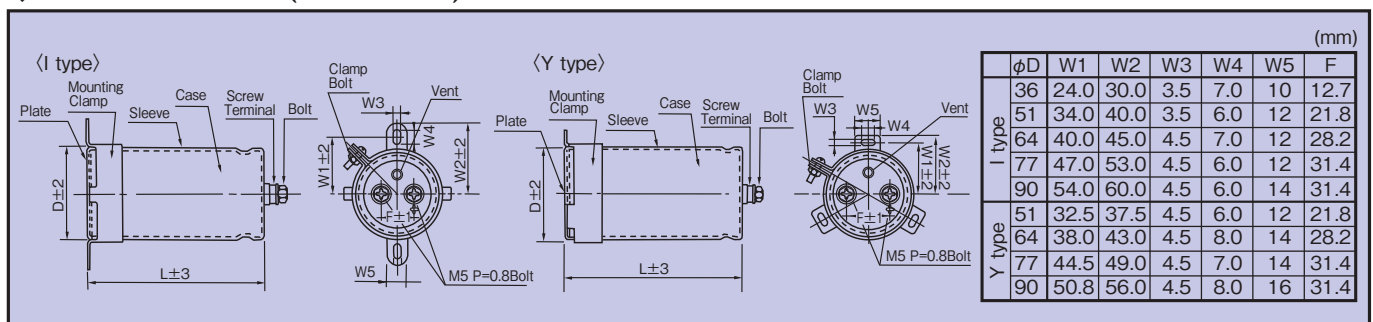
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		60 (50)	120 (100)	400	1k	10k
Coefficient	10~50Vdc	0.80	1.00	1.03	1.05	1.08
	63~100Vdc	0.80	1.00	1.05	1.07	1.10
	160~450Vdc	0.80	1.00	1.10	1.13	1.18

◆PART NUMBER



◆Dimensions in mm (not to scale)



◆STANDARD SIZE

Cap(μF) \ Vdc	10		16		25		35		50		63		80		
3300													36×50	2.5	
3900													36×50	2.6	
4700													36×50	2.8	
5600												36×50	3.0	36×63	2.9
6800										36×50	3.3	36×50	3.2	36×83	3.7
8200										36×50	3.7	36×63	3.8	36×83	4.2
10000							36×50	3.6	36×50	4.3	36×83	4.1	36×98	5.0	
12000							36×50	3.7	36×63	5.3	36×83	4.4	36×118	5.4	
15000							36×50	4.0	36×83	5.5	36×98	5.5	51×83	7.7	
18000					36×50	5.0	36×63	4.7	36×83	5.7	36×118	6.2	51×83	7.8	
22000					36×63	5.4	36×83	5.6	36×98	6.1	51×83	7.1	51×83	8.0	
27000			36×50	5.1	36×83	5.8	36×83	6.2	36×118	6.7	51×83	7.4	51×98	8.7	
33000			36×63	5.5	36×83	6.0	36×83	6.3	51×83	7.1	51×98	8.8	51×118	10.5	
39000	36×50	5.3	36×83	7.0	36×83	6.7	36×98	7.6	51×83	7.4	51×118	10.0	64×99	12.1	
47000	36×63	6.0	36×83	7.3	36×98	8.0	36×118	8.7	51×98	8.7	64×99	11.9	64×99	14.4	
56000	36×83	6.3	36×98	7.6	36×118	8.4	51×83	10.0	51×98	9.8	64×99	12.6	64×119	15.0	
68000	36×83	7.9	36×98	10.3	51×83	9.3	51×83	10.8	51×118	12.0	64×119	15.0	64×139	16.8	
82000	36×83	8.4	36×118	10.5	51×83	10.0	51×98	12.0	64×99	12.3	77×101	16.4	77×121	19.4	
100000	36×118	9.3	51×83	10.9	51×98	12.0	51×118	13.6	64×119	14.2	77×121	18.9	77×141	21.5	
120000	51×83	10.0	51×98	11.1	51×118	12.9	64×99	13.8	64×119	16.0	77×141	21.6	90×141	22.3	
150000	51×83	11.0	51×98	12.6	64×99	15.3	64×99	14.6	77×121	18.6	90×141	26.0			
180000	51×98	12.1	51×118	13.2	64×99	15.5	64×119	16.7	77×141	19.5					
220000	51×98	14.0	64×99	14.7	64×119	18.0	77×101	17.4	90×141	23.3					
270000	51×118	14.2	64×119	15.4	77×101	18.8	77×141	23.1	90×141	24.8					
330000	64×99	17.3	64×139	18.3	77×121	23.2	77×151	25.9							
390000	64×119	18.0	77×121	19.0	77×141	23.5	90×141	26.5							
470000	64×139	19.3	77×141	22.0	90×141	24.7	90×151	28.3							
560000	77×121	20.1	77×151	23.0	90×141	26.2									
680000	77×141	24.0													

Cap(μF) \ Vdc	100		160		200		250		350		400		450	
270											36×50	1.3	36×50	1.6
330											36×50	1.7	36×63	1.8
390									36×50	1.9	36×63	1.8	36×83	2.2
470							36×50	1.6	36×63	2.1	36×83	2.3	36×83	2.4
560							36×50	1.6	36×83	2.4	36×83	2.7	36×98	2.8
680					36×50	1.6	36×50	1.7	36×83	2.9	36×98	2.9	36×118	3.1
820					36×50	1.7	36×63	1.8	36×98	3.4	36×98	3.4	51×83	3.6
1000					36×63	2.2	36×83	2.4	36×98	3.8	36×118	3.9	51×83	4.0
1200			36×50	2.3	36×63	2.3	36×83	2.4	36×118	4.2	51×83	4.2	51×98	4.8
1500			36×63	3.2	36×83	2.9	36×98	3.1	51×83	4.7	51×98	4.8	51×118	5.7
1800			36×83	3.4	36×83	2.9	36×118	3.4	51×98	6.3	51×98	5.7	64×99	6.5
2200	36×50	2.5	36×83	3.6	36×98	3.6	51×83	3.9	51×98	6.4	51×118	7.0	64×99	7.2
2700	36×50	2.7	36×98	3.8	36×118	4.0	51×83	4.0	64×99	8.8	64×99	7.9	64×119	8.7
3300	36×50	3.2	36×118	4.7	51×83	4.6	51×98	5.4	64×99	8.8	64×119	9.5	77×121	10.5
3900	36×63	3.3	51×83	5.3	51×83	4.7	51×118	6.0	64×119	10.3	77×101	10.7	77×121	12.0
4700	36×83	3.5	51×83	5.6	51×98	7.1	64×99	7.3	77×101	12.0	77×121	12.8	77×141	13.3
5600	36×83	3.8	51×98	6.4	51×118	8.3	64×99	7.3	77×121	12.7	77×141	14.5	90×141	15.8
6800	36×98	4.5	51×98	7.5	64×99	9.5	64×119	8.9	77×141	16.0	77×151	17.5	90×151	18.7
8200	36×118	6.0	51×118	8.1	64×99	10.0	77×101	8.9	90×141	19.0	90×141	18.0		
10000	36×118	6.3	64×99	9.9	64×119	11.1	77×121	11.8	90×141	20.0	90×151	20.5		
12000	51×83	6.6	64×119	10.8	77×101	11.6	77×141	13.1						
15000	51×83	8.5	77×101	12.7	77×121	12.9	90×141	16.5						
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100000	90×141	21.0												

↑ Ripple Current (A r.m.s./120Hz, 85°C)
 ↑ Case Size φD×L(mm)

◆Tightening torque of bolt and Permissible current of terminal.

Clamp Bolt	Recommended Tightening torque
M3	0.6 [N·m]
M4	1.3 [N·m]

Terminal	Recommended Tightening torque (Permissible Range)	Permissible Current of Terminal
M5	2.2(1.5~3.2) [N·m]	60Arms