



### LSQ SERIES

#### 85°C Standard, 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	10~100V.DC	160~450V.DC																																																																									
Capacitance Tolerance	±20% (20°C, 120Hz)																																																																										
Dissipation Factor(MAX) (tanδ)	<table border="1"> <thead> <tr> <th>WV \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</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> </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> </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> </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> </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> </tr> </tbody> </table>	WV \ φD	36	51	64	77	90	10	0.75	1.0	1.3	1.5	1.5	16	0.6	0.7	0.8	1.0	1.0	25	0.4	0.5	0.7	0.8	0.8	35	0.3	0.5	0.6	0.7	0.7	50	0.25	0.3	0.5	0.6	0.6	<table border="1"> <thead> <tr> <th>WV \ φD</th> <th>36</th> <th>51</th> <th>64</th> <th>77</th> <th>90</th> </tr> </thead> <tbody> <tr> <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>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>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>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>315~450</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	63	0.2	0.25	0.3	0.4	0.4	80	0.2	0.2	0.25	0.3	0.3	100	0.15	0.2	0.25	0.25	0.25	160~250	0.15	0.15	0.2	0.2	0.2	315~450	0.2	0.2	0.25	0.25	0.25	(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 85°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 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. <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

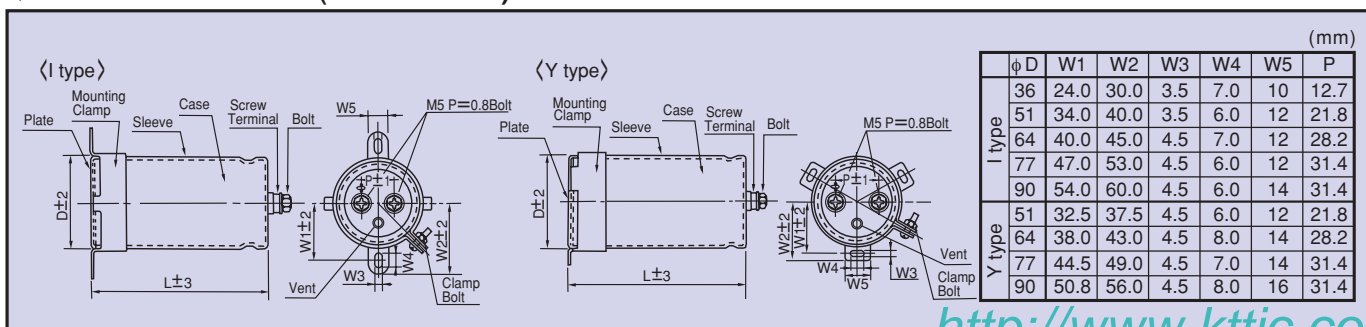
Frequency coefficient

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

#### ◆ PART NUMBER



#### ◆ Dimensions in mm (not to scale)





\*Please notice the following conditions for use.

- (1) Maximum screw terminal tightening torque; 3.2N·m or less.
- (2) Maximum ripple current shall be 50Arms or less because of the rated current of M5 screw terminal.

◆ STANDARD SIZE

Cap(μF) \ WV	10V		16V		25V		35V		50V		63V		80V		
3300													36x50	2.5	
3900													36x50	2.6	
4700													36x50	2.8	
5600												36x50	3.0	36x63	2.9
6800									36x50	3.3	36x50	3.2	36x83	3.7	
8200									36x50	3.7	36x63	3.8	36x83	4.2	
10000								36x50	3.6	36x50	4.3	36x83	4.1	36x98	5.0
12000								36x50	3.7	36x63	5.3	36x83	4.4	36x118	5.4
15000								36x50	4.0	36x83	5.5	36x98	5.5	51x83	7.7
18000						36x50	5.0	36x63	4.7	36x83	5.7	36x118	6.2	51x83	7.8
22000						36x63	5.4	36x83	5.6	36x98	6.1	51x83	7.1	51x83	8.0
27000			36x50	5.1	36x83	5.8	36x83	6.2	36x118	6.7	51x83	7.4	51x98	8.7	
33000			36x63	5.5	36x83	6.0	36x83	6.3	51x83	7.1	51x98	8.8	51x118	10.5	
39000	36x50	5.3	36x83	7.0	36x83	6.7	36x98	7.6	51x83	7.4	51x118	10.0	64x99	12.1	
47000	36x63	6.0	36x83	7.3	36x98	8.0	36x118	8.7	51x98	8.7	64x99	11.9	64x99	14.4	
56000	36x83	6.3	36x98	7.6	36x118	8.4	51x83	10.0	51x98	9.8	64x99	12.6	64x119	15.0	
68000	36x83	7.9	36x98	10.3	51x83	9.3	51x83	10.8	51x118	12.0	64x119	15.0	64x139	16.8	
82000	36x83	8.4	36x118	10.5	51x83	10.0	51x98	12.0	64x99	12.3	77x101	16.4	77x121	19.4	
100000	36x118	9.3	51x83	10.9	51x98	12.0	51x118	13.6	64x119	14.2	77x121	18.9	77x141	21.5	
120000	51x83	10.0	51x98	11.1	51x118	12.9	64x99	13.8	64x119	16.0	77x141	21.6	90x141	22.3	
150000	51x83	11.0	51x98	12.6	64x99	15.3	64x99	14.6	77x121	18.6	90x141	26.0			
180000	51x98	12.1	51x118	13.2	64x99	15.5	64x119	16.7	77x141	19.5					
220000	51x98	14.0	64x99	14.7	64x119	18.0	77x101	17.4	90x141	23.3					
270000	51x118	14.2	64x119	15.4	77x101	18.8	77x141	23.1	90x141	24.8					
330000	64x99	17.3	64x139	18.3	77x121	23.2	77x151	25.9							
390000	64x119	18.0	77x121	19.0	77x141	23.5	90x141	26.5							
470000	64x139	19.3	77x141	22.0	90x141	24.7	90x151	28.3							
560000	77x121	20.1	77x151	23.0	90x141	26.2									
680000	77x141	24.0													

Cap(μF) \ WV	100V		160V		200V		250V		350V		400V		450V		
270											36x50	1.3	36x50	1.6	
330											36x50	1.7	36x63	1.8	
390									36x50	1.9	36x63	1.8	36x83	2.2	
470								36x50	1.6	36x63	2.1	36x83	2.3	36x83	2.4
560								36x50	1.6	36x83	2.4	36x83	2.7	36x98	2.8
680						36x50	1.6	36x50	1.7	36x83	2.9	36x98	2.9	36x118	3.1
820						36x50	1.7	36x63	1.8	36x98	3.4	36x98	3.4	51x83	3.6
1000						36x63	2.2	36x83	2.4	36x98	3.8	36x118	3.9	51x83	4.0
1200			36x50	2.3	36x63	2.3	36x83	2.4	36x118	4.2	51x83	4.2	51x98	4.8	
1500			36x63	3.2	36x83	2.9	36x98	3.1	51x83	4.7	51x98	4.8	51x118	5.7	
1800			36x83	3.4	36x83	2.9	36x118	3.4	51x98	6.3	51x98	5.7	64x99	6.5	
2200	36x50	2.5	36x83	3.6	36x98	3.6	51x83	3.9	51x98	6.4	51x118	7.0	64x99	7.2	
2700	36x50	2.7	36x98	3.8	36x118	4.0	51x83	4.0	64x99	8.8	64x99	7.9	64x119	8.7	
3300	36x50	3.2	36x118	4.7	51x83	4.6	51x98	5.4	64x99	8.8	64x119	9.5	77x121	10.5	
3900	36x63	3.3	51x83	5.3	51x83	4.7	51x118	6.0	64x119	10.3	77x101	10.7	77x121	12.0	
4700	36x83	3.5	51x83	5.6	51x98	7.1	64x99	7.3	77x101	12.0	77x121	12.8	77x141	13.3	
5600	36x83	3.8	51x98	6.4	51x118	8.3	64x99	7.3	77x121	12.7	77x141	14.5	90x141	15.8	
6800	36x98	4.5	51x98	7.5	64x99	9.5	64x119	8.9	77x141	16.0	77x151	17.5	90x151	18.7	
8200	36x118	6.0	51x118	8.1	64x99	10.0	77x101	8.9	90x141	19.0	90x141	18.0			
10000	36x118	6.3	64x99	9.9	64x119	11.1	77x121	11.8	90x141	20.0	90x151	20.5			
12000	51x83	6.6	64x119	10.8	77x101	11.6	77x141	13.1							
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68000	77x151	18.3													
82000	90x141	20.1													
100000	90x141	21.0													

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