

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℃						-25~+85℃																																																																															
Rated Voltage Range	10~100V.DC						160~450V.DC																																																																															
Capacitance Tolerance	±20% (20℃,120Hz)																																																																																					
Dissipation Factor(MAX) (tanδ)	<table><tr><td>WV\φD</td><td>36</td><td>51</td><td>64</td><td>77</td><td>90</td></tr><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></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><tr><td>WV\φD</td><td>36</td><td>51</td><td>64</td><td>77</td><td>90</td></tr><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>350~450</td><td>0.2</td><td>0.2</td><td>0.25</td><td>0.25</td><td>0.25</td></tr></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	350~450	0.2	0.2	0.25	0.25	0.25	(20℃, 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) C=Capacitance(μF) V=Rated Voltage(V)																																																																																					
Endurance	After applying rated voltage with rated ripple current for 3000 hours at 85℃, the capacitors shall meet the following requirements. <table><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℃, 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><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	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

LSQ M D×L
 Rated Voltage Series Capacitance Capacitance Tolerance Option Clamp Code Case Size

◆Dimensions in mm (not to scale)

		(mm)						
I type	φD	W1	W2	W3	W4	W5	F	
	36	24.0	30.0	3.5	7.0	10	12.7	
Y type	51	34.0	40.0	3.5	6.0	12	21.8	
	64	40.0	45.0	4.5	7.0	12	28.2	
Y type	77	47.0	53.0	4.5	6.0	12	31.4	
	90	54.0	60.0	4.5	6.0	14	31.4	
Y type	51	32.5	37.5	4.5	6.0	12	21.8	
	64	38.0	43.0	4.5	8.0	14	28.2	
Y type	77	44.5	49.0	4.5	7.0	14	31.4	
	90	50.8	56.0	4.5	8.0	16	31.4	

※Please refer to page 163 about recommended tightening torque and permissible current of terminal.

◆STANDARD SIZE

V.DC Cap(μF)	10V	16V	25V	35V	50V	63V	80V
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						

V.DC Cap(μF)	100V	160V	200V	250V	350V	400V	450V
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			
18000	51×98 8.9	77×121 14.1	77×141 15.2				
22000	51×118 10.2	77×141 16.6	90×141 15.6				
27000	64×99 11.0	90×141 17.7					
33000	64×119 11.7	90×141 18.9					
39000	77×101 12.5						
47000	77×121 14.5						
56000	77×141 16.2						
68000	77×151 18.3						
82000	90×141 20.1						
100000	90×141 21.0						

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