

## LS Series

### Features

- Snap-in terminal type
- 85°C, 3,000 hours assured
- RoHS Compliance



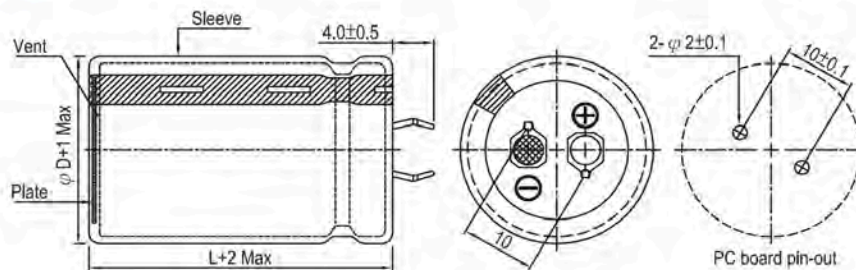
Sleeve & Marking Color: Black & White

### Specifications

Items	Performance																																																	
Category	16 ~ 400V	420 ~ 500V																																																
Temperature Range	-40°C ~ +85°C	-25°C ~ +85°C																																																
Capacitance Tolerance	±20% (at 120Hz, 20°C)																																																	
Leakage Current (at 20°C)	I = 3√CV or 1.5 mA whichever is smaller (after 5 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																																																	
Tanδ (at 120Hz, 20°C)	<table border="1"> <tr> <th>Rated Voltage</th> <td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>420</td><td>450</td><td>500</td> </tr> <tr> <th>Tanδ (max)</th> <td>0.50</td><td>0.45</td><td>0.40</td><td>0.35</td><td>0.30</td><td>0.25</td><td>0.20</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td> </tr> </table>		Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500	Tanδ (max)	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15																
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Tanδ (max)	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15																																			
Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <tr> <th>Rated Voltage</th> <td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>420</td><td>450</td><td>500</td> </tr> <tr> <th>Impedance Ratio</th> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td><td>3</td><td>3</td><td>2</td><td>2</td><td>2</td><td>4</td><td>4</td><td>4</td><td>4</td><td>8</td><td>8</td><td>8</td><td>8</td> </tr> <tr> <td></td> <td>Z(-40°C)/Z(+20°C)</td> <td>15</td><td>10</td><td>8</td><td>6</td><td>5</td><td>5</td><td>4</td><td>8</td><td>10</td><td>10</td><td>16</td><td>18</td><td>-</td><td>-</td> </tr> </table>		Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500	Impedance Ratio	Z(-25°C)/Z(+20°C)	4	3	3	2	2	2	4	4	4	4	8	8	8	8		Z(-40°C)/Z(+20°C)	15	10	8	6	5	5	4	8	10	10	16	18	-	-
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Endurance	<table border="1"> <tr> <th>Test Time</th> <td>3,000 Hrs</td> </tr> <tr> <th>Capacitance Change</th> <td>Within ±20% of initial value</td> </tr> <tr> <th>Tanδ</th> <td>Less than 200% of specified value</td> </tr> <tr> <th>Leakage Current</th> <td>Within specified value</td> </tr> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 3,000 hours at 85°C.</p>		Test Time	3,000 Hrs	Capacitance Change	Within ±20% of initial value	Tanδ	Less than 200% of specified value	Leakage Current	Within specified value																																								
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Shelf Life Test	<table border="1"> <tr> <th>Test Time</th> <td>1,000 Hrs</td> </tr> <tr> <th>Capacitance Change</th> <td>Within ±20% of initial value</td> </tr> <tr> <th>Tanδ</th> <td>Less than 150% of specified value</td> </tr> <tr> <th>Leakage Current</th> <td>Within specified value</td> </tr> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).</p>		Test Time	1,000 Hrs	Capacitance Change	Within ±20% of initial value	Tanδ	Less than 150% of specified value	Leakage Current	Within specified value																																								
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Ripple Current and Frequency Multipliers	<table border="1"> <tr> <th rowspan="2">Case size</th> <th rowspan="2">W. V.(V)</th> <th colspan="5">Freq.(Hz)</th> </tr> <tr> <th>50 / 60</th> <th>100 / 120</th> <th>500</th> <th>1k</th> <th>10k up</th> </tr> <tr> <td rowspan="3">Length ≤ 55L</td> <td>Under 100</td> <td>0.92</td> <td>1.00</td> <td>1.13</td> <td>1.19</td> <td>1.20</td> </tr> <tr> <td>160 ~ 250</td> <td>0.81</td> <td>1.00</td> <td>1.32</td> <td>1.45</td> <td>1.50</td> </tr> <tr> <td>350 to up</td> <td>0.77</td> <td>1.00</td> <td>1.30</td> <td>1.41</td> <td>1.43</td> </tr> <tr> <td>Length ≥ 60L</td> <td>160 ~ 450</td> <td>0.88</td> <td>1.00</td> <td>1.20</td> <td>1.25</td> <td>1.40</td> </tr> </table>		Case size	W. V.(V)	Freq.(Hz)					50 / 60	100 / 120	500	1k	10k up	Length ≤ 55L	Under 100	0.92	1.00	1.13	1.19	1.20	160 ~ 250	0.81	1.00	1.32	1.45	1.50	350 to up	0.77	1.00	1.30	1.41	1.43	Length ≥ 60L	160 ~ 450	0.88	1.00	1.20	1.25	1.40										
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Length ≥ 60L	160 ~ 450	0.88	1.00	1.20	1.25	1.40																																												
Failure percentage Failure rate	<p>≤ 3% (During useful life)</p> <p>Rated Voltage ≤ 100V DC: ≤ 40 fit (40×10<sup>-9</sup>/h)      Rated voltage ≥ 160V DC: ≤ 70 fit (70×10<sup>-9</sup>/h)</p>																																																	

### Diagram of Dimensions

Unit: mm



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## Dimension and Permissible Ripple Current

Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
16	8,200	20 × 25	2.41	0.50	0.081	1.09	LS-822M1C--A2025
	8,200	22 × 25	2.56	0.50	0.081	1.09	LS-822M1C--A2225
	10,000	20 × 25	2.46	0.50	0.066	1.20	LS-103M1C--A2025
	10,000	22 × 25	2.60	0.50	0.066	1.20	LS-103M1C--A2225
	10,000	25 × 25	2.81	0.50	0.066	1.20	LS-103M1C--A2525
	12,000	20 × 30	2.92	0.50	0.055	1.31	LS-123M1C--A2030
	12,000	22 × 25	2.88	0.50	0.055	1.31	LS-123M1C--A2225
	12,000	25 × 25	2.96	0.50	0.055	1.31	LS-123M1C--A2525
	15,000	20 × 35	3.49	0.50	0.044	1.47	LS-153M1C--A2035
	15,000	22 × 30	3.45	0.50	0.044	1.47	LS-153M1C--A2230
	15,000	25 × 25	3.38	0.50	0.044	1.47	LS-153M1C--A2525
	15,000	30 × 25	3.73	0.50	0.044	1.47	LS-153M1C--A3025
	18,000	20 × 40	3.72	0.50	0.037	1.50	LS-183M1C--A2040
	18,000	22 × 30	3.47	0.50	0.037	1.50	LS-183M1C--A2230
	18,000	25 × 25	3.47	0.50	0.037	1.50	LS-183M1C--A2525
	22,000	20 × 45	4.07	0.50	0.030	1.50	LS-223M1C--A2045
	22,000	22 × 35	3.84	0.50	0.030	1.50	LS-223M1C--A2235
	22,000	25 × 30	3.93	0.50	0.030	1.50	LS-223M1C--A2530
	22,000	30 × 25	4.08	0.50	0.030	1.50	LS-223M1C--A3025
	22,000	35 × 25	4.15	0.50	0.030	1.50	LS-223M1C--A3525
	27,000	22 × 45	4.63	0.50	0.025	1.50	LS-273M1C--A2245
	27,000	25 × 40	4.72	0.50	0.025	1.50	LS-273M1C--A2540
	33,000	22 × 50	5.20	0.50	0.020	1.50	LS-333M1C--A2250
	33,000	25 × 45	5.41	0.50	0.020	1.50	LS-333M1C--A2545
	33,000	30 × 35	5.40	0.50	0.020	1.50	LS-333M1C--A3035
	33,000	35 × 25	5.19	0.50	0.020	1.50	LS-333M1C--A3525
	39,000	30 × 40	6.02	0.50	0.017	1.50	LS-393M1C--A3040
	39,000	35 × 30	5.88	0.50	0.017	1.50	LS-393M1C--A3530
	47,000	30 × 45	6.95	0.50	0.014	1.50	LS-473M1C--A3045
	47,000	35 × 35	6.85	0.50	0.014	1.50	LS-473M1C--A3535
	56,000	35 × 40	7.39	0.50	0.012	1.50	LS-563M1C--A3540
	68,000	35 × 45	8.06	0.50	0.010	1.50	LS-683M1C--A3545
25	5,600	20 × 25	2.18	0.45	0.107	1.12	LS-562M1E--A2025
	5,600	22 × 25	2.31	0.45	0.107	1.12	LS-562M1E--A2225
	6,800	20 × 25	2.25	0.45	0.088	1.24	LS-682M1E--A2025
	6,800	22 × 25	2.38	0.45	0.088	1.24	LS-682M1E--A2225
	6,800	25 × 25	2.78	0.45	0.088	1.24	LS-682M1E--A2525
	8,200	20 × 30	2.30	0.45	0.073	1.36	LS-822M1E--A2030
	8,200	22 × 25	2.43	0.45	0.073	1.36	LS-822M1E--A2225
	8,200	25 × 25	2.85	0.45	0.073	1.36	LS-822M1E--A2525
	10,000	20 × 35	2.97	0.45	0.060	1.50	LS-103M1E--A2035
	10,000	22 × 30	2.97	0.45	0.060	1.50	LS-103M1E--A2230
	10,000	25 × 25	2.93	0.45	0.060	1.50	LS-103M1E--A2525
	10,000	30 × 25	3.21	0.45	0.060	1.50	LS-103M1E--A3025
	12,000	22 × 35	3.33	0.45	0.050	1.50	LS-123M1E--A2235
	12,000	25 × 30	3.26	0.45	0.050	1.50	LS-123M1E--A2530
	12,000	30 × 25	3.59	0.45	0.050	1.50	LS-123M1E--A3025
	12,000	35 × 25	3.58	0.45	0.050	1.50	LS-123M1E--A3525
	15,000	22 × 40	3.68	0.45	0.040	1.50	LS-153M1E--A2240
	15,000	25 × 35	3.77	0.45	0.040	1.50	LS-153M1E--A2535
	15,000	30 × 25	3.60	0.45	0.040	1.50	LS-153M1E--A3025
	15,000	35 × 25	3.96	0.45	0.040	1.50	LS-153M1E--A3525
	18,000	22 × 45	4.36	0.45	0.033	1.50	LS-183M1E--A2245
	18,000	25 × 35	4.20	0.45	0.033	1.50	LS-183M1E--A2535
	18,000	30 × 30	4.40	0.45	0.033	1.50	LS-183M1E--A3030
	18,000	35 × 25	4.34	0.45	0.033	1.50	LS-183M1E--A3525
	22,000	25 × 45	4.71	0.45	0.027	1.50	LS-223M1E--A2545
	22,000	30 × 35	4.70	0.45	0.027	1.50	LS-223M1E--A3035
	22,000	35 × 25	4.60	0.45	0.027	1.50	LS-223M1E--A3525
	27,000	30 × 45	5.79	0.45	0.022	1.50	LS-273M1E--A3045
	27,000	35 × 35	5.71	0.45	0.022	1.50	LS-273M1E--A3535
	33,000	35 × 40	6.31	0.45	0.018	1.50	LS-333M1E--A3540
	39,000	35 × 45	6.92	0.45	0.015	1.50	LS-393M1E--A3545
	35	4,700	22 × 25	2.21	0.40	0.113	1.22
4,700		25 × 25	2.42	0.40	0.113	1.22	LS-472M1V--A2525

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## Dimension and Permissible Ripple Current

Working Voltage V DC	Capacitance 120Hz, 20°C µF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
<b>35</b>	5,600	20 × 30	2.54	0.40	0.095	1.33	LS-562M1V--A2030
	5,600	22 × 30	2.69	0.40	0.095	1.33	LS-562M1V--A2230
	5,600	25 × 25	2.69	0.40	0.095	1.33	LS-562M1V--A2525
	6,800	20 × 35	2.60	0.40	0.078	1.46	LS-682M1V--A2035
	6,800	22 × 35	2.70	0.40	0.078	1.46	LS-682M1V--A2235
	6,800	25 × 25	2.67	0.40	0.078	1.46	LS-682M1V--A2525
	6,800	30 × 25	2.99	0.40	0.078	1.46	LS-682M1V--A3025
	8,200	20 × 40	3.02	0.40	0.065	1.50	LS-822M1V--A2040
	8,200	22 × 35	3.09	0.40	0.065	1.50	LS-822M1V--A2235
	8,200	25 × 30	3.12	0.40	0.065	1.50	LS-822M1V--A2530
	8,200	30 × 25	3.04	0.40	0.065	1.50	LS-822M1V--A3025
	10,000	22 × 40	3.22	0.40	0.053	1.50	LS-103M1V--A2240
	10,000	25 × 35	3.37	0.40	0.053	1.50	LS-103M1V--A2535
	10,000	30 × 25	3.36	0.40	0.053	1.50	LS-103M1V--A3025
	10,000	35 × 25	3.32	0.40	0.053	1.50	LS-103M1V--A3525
	12,000	22 × 45	3.71	0.40	0.044	1.50	LS-123M1V--A2245
	12,000	25 × 40	3.79	0.40	0.044	1.50	LS-123M1V--A2540
	12,000	30 × 30	3.74	0.40	0.044	1.50	LS-123M1V--A3030
	12,000	35 × 25	3.75	0.40	0.044	1.50	LS-123M1V--A3525
	15,000	25 × 45	4.55	0.40	0.035	1.50	LS-153M1V--A2545
	15,000	30 × 35	4.54	0.40	0.035	1.50	LS-153M1V--A3035
	15,000	35 × 25	4.37	0.40	0.035	1.50	LS-153M1V--A3525
	18,000	25 × 50	4.84	0.40	0.029	1.50	LS-183M1V--A2550
	18,000	30 × 40	4.87	0.40	0.029	1.50	LS-183M1V--A3040
	18,000	35 × 30	5.03	0.40	0.029	1.50	LS-183M1V--A3530
	22,000	30 × 45	5.79	0.40	0.024	1.50	LS-223M1V--A3045
	22,000	35 × 35	5.71	0.40	0.024	1.50	LS-223M1V--A3535
27,000	35 × 45	6.81	0.40	0.020	1.50	LS-273M1V--A3545	
<b>50</b>	2,200	22 × 25	1.93	0.35	0.211	0.99	LS-222M1H--A2225
	2,700	22 × 25	2.05	0.35	0.172	1.10	LS-272M1H--A2225
	3,300	22 × 30	2.41	0.35	0.141	1.22	LS-332M1H--A2230
	3,300	25 × 25	2.38	0.35	0.141	1.22	LS-332M1H--A2525
	3,900	22 × 30	2.51	0.35	0.119	1.32	LS-392M1H--A2230
	3,900	25 × 25	2.46	0.35	0.119	1.32	LS-392M1H--A2525
	4,700	22 × 35	2.83	0.35	0.099	1.45	LS-472M1H--A2235
	4,700	25 × 30	3.03	0.35	0.099	1.45	LS-472M1H--A2530
	4,700	30 × 25	3.01	0.35	0.099	1.45	LS-472M1H--A3025
	5,600	22 × 40	3.21	0.35	0.083	1.50	LS-562M1H--A2240
	5,600	25 × 35	3.37	0.35	0.083	1.50	LS-562M1H--A2535
	5,600	30 × 25	3.17	0.35	0.083	1.50	LS-562M1H--A3025
	5,600	35 × 25	3.47	0.35	0.083	1.50	LS-562M1H--A3525
	6,800	22 × 45	3.73	0.35	0.068	1.50	LS-682M1H--A2245
	6,800	25 × 35	3.59	0.35	0.068	1.50	LS-682M1H--A2535
	6,800	30 × 30	3.56	0.35	0.068	1.50	LS-682M1H--A3030
	6,800	35 × 25	3.64	0.35	0.068	1.50	LS-682M1H--A3525
	8,200	25 × 40	4.10	0.35	0.057	1.50	LS-822M1H--A2540
	8,200	30 × 30	4.12	0.35	0.057	1.50	LS-822M1H--A3030
	8,200	35 × 25	4.07	0.35	0.057	1.50	LS-822M1H--A3525
	10,000	25 × 50	4.91	0.35	0.046	1.50	LS-103M1H--A2550
	10,000	30 × 35	4.68	0.35	0.046	1.50	LS-103M1H--A3035
	10,000	35 × 30	4.59	0.35	0.046	1.50	LS-103M1H--A3530
	12,000	30 × 40	5.10	0.35	0.039	1.50	LS-123M1H--A3040
	12,000	35 × 35	5.30	0.35	0.039	1.50	LS-123M1H--A3535
	15,000	30 × 50	6.28	0.35	0.031	1.50	LS-153M1H--A3050
	15,000	35 × 40	6.24	0.35	0.031	1.50	LS-153M1H--A3540
18,000	35 × 45	7.18	0.35	0.026	1.50	LS-183M1H--A3545	
<b>63</b>	1,800	22 × 25	1.90	0.30	0.221	1.01	LS-182M1J--A2225
	2,200	22 × 30	2.35	0.30	0.181	1.12	LS-222M1J--A2230
	2,200	25 × 25	2.30	0.30	0.181	1.12	LS-222M1J--A2525
	2,700	22 × 35	2.50	0.30	0.147	1.24	LS-272M1J--A2235
	2,700	25 × 25	2.34	0.30	0.147	1.24	LS-272M1J--A2525
	3,300	22 × 35	2.62	0.30	0.121	1.37	LS-332M1J--A2235
	3,300	25 × 30	2.69	0.30	0.121	1.37	LS-332M1J--A2530
	3,300	30 × 25	2.78	0.30	0.121	1.37	LS-332M1J--A3025
	3,900	22 × 40	2.90	0.30	0.102	1.49	LS-392M1J--A2240

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## Dimension and Permissible Ripple Current

Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
<b>63</b>	3,900	25 × 35	3.09	0.30	0.102	1.49	LS-392M1J--A2535
	3,900	30 × 30	3.09	0.30	0.102	1.49	LS-392M1J--A3030
	4,700	22 × 50	3.49	0.30	0.085	1.50	LS-472M1J--A2250
	4,700	25 × 40	3.37	0.30	0.085	1.50	LS-472M1J--A2540
	4,700	30 × 30	3.37	0.30	0.085	1.50	LS-472M1J--A3030
	4,700	35 × 25	3.36	0.30	0.085	1.50	LS-472M1J--A3525
	5,600	25 × 45	3.77	0.30	0.071	1.50	LS-562M1J--A2545
	5,600	30 × 35	3.75	0.30	0.071	1.50	LS-562M1J--A3035
	5,600	35 × 30	3.88	0.30	0.071	1.50	LS-562M1J--A3530
	6,800	25 × 50	4.41	0.30	0.059	1.50	LS-682M1J--A2550
	6,800	30 × 40	4.41	0.30	0.059	1.50	LS-682M1J--A3040
	6,800	35 × 30	4.04	0.30	0.059	1.50	LS-682M1J--A3530
	10,000	30 × 50	5.49	0.30	0.040	1.50	LS-103M1J--A3050
	10,000	35 × 40	5.47	0.30	0.040	1.50	LS-103M1J--A3540
12,000	35 × 45	5.97	0.30	0.033	1.50	LS-123M1J--A3545	
<b>80</b>	1,200	22 × 25	1.62	0.25	0.276	0.93	LS-122M1K--A2225
	1,500	22 × 25	1.81	0.25	0.221	1.04	LS-152M1K--A2225
	1,800	22 × 30	2.14	0.25	0.184	1.14	LS-182M1K--A2230
	1,800	25 × 25	2.14	0.25	0.184	1.14	LS-182M1K--A2525
	2,200	22 × 35	2.37	0.25	0.151	1.26	LS-222M1K--A2235
	2,200	25 × 30	2.39	0.25	0.151	1.26	LS-222M1K--A2530
	2,200	30 × 25	2.48	0.25	0.151	1.26	LS-222M1K--A3025
	2,700	22 × 40	2.78	0.25	0.123	1.39	LS-272M1K--A2240
	2,700	25 × 35	2.82	0.25	0.123	1.39	LS-272M1K--A2535
	2,700	30 × 25	2.74	0.25	0.123	1.39	LS-272M1K--A3025
	3,300	22 × 45	3.14	0.25	0.101	1.50	LS-332M1K--A2245
	3,300	25 × 40	3.20	0.25	0.101	1.50	LS-332M1K--A2540
	3,300	30 × 30	3.16	0.25	0.101	1.50	LS-332M1K--A3030
	3,300	35 × 25	3.24	0.25	0.101	1.50	LS-332M1K--A3525
	3,900	22 × 50	3.58	0.25	0.085	1.50	LS-392M1K--A2250
	3,900	25 × 45	3.67	0.25	0.085	1.50	LS-392M1K--A2545
	3,900	30 × 35	3.66	0.25	0.085	1.50	LS-392M1K--A3035
	3,900	35 × 25	3.52	0.25	0.085	1.50	LS-392M1K--A3525
	4,700	25 × 50	4.10	0.25	0.071	1.50	LS-472M1K--A2550
	4,700	30 × 40	4.13	0.25	0.071	1.50	LS-472M1K--A3040
	4,700	35 × 30	4.03	0.25	0.071	1.50	LS-472M1K--A3530
	5,600	30 × 45	4.61	0.25	0.059	1.50	LS-562M1K--A3045
	5,600	35 × 35	4.54	0.25	0.059	1.50	LS-562M1K--A3535
	6,800	30 × 50	5.18	0.25	0.049	1.50	LS-682M1K--A3050
	6,800	35 × 40	5.15	0.25	0.049	1.50	LS-682M1K--A3540
	8,200	35 × 45	5.80	0.25	0.040	1.50	LS-822M1K--A3545
	10,000	35 × 50	6.69	0.25	0.033	1.50	LS-103M1K--A3550
	<b>100</b>	1,200	22 × 30	2.12	0.20	0.221	1.04
1,200		25 × 25	2.10	0.20	0.221	1.04	LS-122M2A--A2525
1,500		22 × 35	2.45	0.20	0.177	1.16	LS-152M2A--A2235
1,500		25 × 30	2.43	0.20	0.177	1.16	LS-152M2A--A2530
1,500		30 × 25	2.46	0.20	0.177	1.16	LS-152M2A--A3025
1,800		22 × 40	2.77	0.20	0.147	1.27	LS-182M2A--A2240
1,800		25 × 35	2.77	0.20	0.147	1.27	LS-182M2A--A2535
1,800		30 × 25	2.65	0.20	0.147	1.27	LS-182M2A--A3025
2,200		22 × 45	3.12	0.20	0.121	1.41	LS-222M2A--A2245
2,200		25 × 40	3.20	0.20	0.121	1.41	LS-222M2A--A2540
2,200		30 × 30	3.10	0.20	0.121	1.41	LS-222M2A--A3030
2,200		35 × 25	3.14	0.20	0.121	1.41	LS-222M2A--A3525
2,700		25 × 45	3.61	0.20	0.098	1.50	LS-272M2A--A2545
2,700		30 × 35	3.60	0.20	0.098	1.50	LS-272M2A--A3035
2,700		35 × 30	3.71	0.20	0.098	1.50	LS-272M2A--A3530
3,300		25 × 50	4.06	0.20	0.080	1.50	LS-332M2A--A2550
3,300		30 × 40	4.05	0.20	0.080	1.50	LS-332M2A--A3040
3,300		35 × 35	4.07	0.20	0.080	1.50	LS-332M2A--A3535
3,900		30 × 45	4.60	0.20	0.068	1.50	LS-392M2A--A3045
3,900		35 × 35	4.50	0.20	0.068	1.50	LS-392M2A--A3535
4,700		30 × 50	5.13	0.20	0.056	1.50	LS-472M2A--A3050
4,700		35 × 40	5.12	0.20	0.056	1.50	LS-472M2A--A3540
5,600		35 × 45	5.75	0.20	0.047	1.50	LS-562M2A--A3545

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## Dimension and Permissible Ripple Current

Working Voltage V DC	Capacitance 120Hz, 20°C µF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
<b>100</b>	6,800	35 × 50	6.01	0.20	0.039	1.50	LS-682M2A--A3550
<b>160</b>	270	20 × 25	1.12	0.15	0.737	0.62	LS-271M2C--A2025
	270	22 × 25	1.27	0.15	0.737	0.62	LS-271M2C--A2225
	330	20 × 30	1.28	0.15	0.603	0.69	LS-331M2C--A2030
	330	22 × 25	1.40	0.15	0.603	0.69	LS-331M2C--A2225
	390	22 × 30	1.62	0.15	0.510	0.75	LS-391M2C--A2230
	470	22 × 30	1.77	0.15	0.423	0.82	LS-471M2C--A2230
	470	25 × 25	1.77	0.15	0.423	0.82	LS-471M2C--A2525
	560	22 × 30	1.92	0.15	0.355	0.90	LS-561M2C--A2230
	560	22 × 35	2.05	0.15	0.355	0.90	LS-561M2C--A2235
	560	25 × 25	1.92	0.15	0.355	0.90	LS-561M2C--A2525
	560	30 × 25	2.02	0.15	0.355	0.90	LS-561M2C--A3025
	680	22 × 35	2.12	0.15	0.293	0.99	LS-681M2C--A2235
	680	25 × 30	2.22	0.15	0.293	0.99	LS-681M2C--A2530
	680	30 × 25	2.22	0.15	0.293	0.99	LS-681M2C--A3025
	820	22 × 40	2.32	0.15	0.243	1.09	LS-821M2C--A2240
	820	25 × 30	2.32	0.15	0.243	1.09	LS-821M2C--A2530
	820	30 × 25	2.31	0.15	0.243	1.09	LS-821M2C--A3025
	820	35 × 25	2.50	0.15	0.243	1.09	LS-821M2C--A3525
	1,000	22 × 50	2.88	0.15	0.199	1.20	LS-102M2C--A2250
	1,000	25 × 40	2.86	0.15	0.199	1.20	LS-102M2C--A2540
	1,000	30 × 30	2.82	0.15	0.199	1.20	LS-102M2C--A3030
	1,000	35 × 25	2.79	0.15	0.199	1.20	LS-102M2C--A3525
	1,200	25 × 45	3.27	0.15	0.166	1.31	LS-122M2C--A2545
	1,200	30 × 35	3.25	0.15	0.166	1.31	LS-122M2C--A3035
	1,200	35 × 30	3.24	0.15	0.166	1.31	LS-122M2C--A3530
	1,500	30 × 40	3.77	0.15	0.133	1.47	LS-152M2C--A3040
	1,500	35 × 35	3.75	0.15	0.133	1.47	LS-152M2C--A3535
	1,800	30 × 45	4.10	0.15	0.111	1.50	LS-182M2C--A3045
	1,800	35 × 35	4.08	0.15	0.111	1.50	LS-182M2C--A3535
	2,200	35 × 45	4.72	0.15	0.090	1.50	LS-222M2C--A3545
	2,700	35 × 55	5.53	0.15	0.074	1.50	LS-272M2C--A3555
	3,300	35 × 70	6.80	0.15	0.060	1.50	LS-332M2C--A3570
3,300	40 × 50	6.34	0.15	0.060	1.50	LS-332M2C--A4050	
3,900	35 × 80	7.84	0.15	0.051	1.50	LS-392M2C--A3580	
3,900	40 × 60	7.45	0.15	0.051	1.50	LS-392M2C--A4060	
4,700	35 × 90	8.62	0.15	0.042	1.50	LS-472M2C--A3590	
4,700	40 × 80	8.79	0.15	0.042	1.50	LS-472M2C--A4080	
<b>200</b>	220	22 × 25	1.15	0.15	0.905	0.63	LS-221M2D--A2225
	270	22 × 25	1.30	0.15	0.737	0.70	LS-271M2D--A2225
	330	22 × 25	1.40	0.15	0.603	0.77	LS-331M2D--A2225
	330	25 × 25	1.43	0.15	0.603	0.77	LS-331M2D--A2525
	390	22 × 25	1.42	0.15	0.510	0.84	LS-391M2D--A2225
	390	25 × 25	1.63	0.15	0.510	0.84	LS-391M2D--A2525
	470	22 × 30	1.68	0.15	0.423	0.92	LS-471M2D--A2230
	470	25 × 25	1.68	0.15	0.423	0.92	LS-471M2D--A2525
	470	30 × 25	1.85	0.15	0.423	0.92	LS-471M2D--A3025
	560	22 × 35	1.97	0.15	0.355	1.00	LS-561M2D--A2235
	560	25 × 30	2.05	0.15	0.355	1.00	LS-561M2D--A2530
	560	30 × 25	2.05	0.15	0.355	1.00	LS-561M2D--A3025
	680	22 × 40	2.24	0.15	0.293	1.11	LS-681M2D--A2240
	680	25 × 30	2.13	0.15	0.293	1.11	LS-681M2D--A2530
	680	30 × 25	2.21	0.15	0.293	1.11	LS-681M2D--A3025
	680	35 × 25	2.43	0.15	0.293	1.11	LS-681M2D--A3525
	820	22 × 45	2.32	0.15	0.243	1.21	LS-821M2D--A2245
	820	25 × 35	2.23	0.15	0.243	1.21	LS-821M2D--A2535
	820	30 × 30	2.62	0.15	0.243	1.21	LS-821M2D--A3030
	820	35 × 25	2.68	0.15	0.243	1.21	LS-821M2D--A3525
	1,000	22 × 50	2.57	0.15	0.199	1.34	LS-102M2D--A2250
	1,000	25 × 40	2.50	0.15	0.199	1.34	LS-102M2D--A2540
	1,000	30 × 30	2.47	0.15	0.199	1.34	LS-102M2D--A3030
	1,000	35 × 25	2.53	0.15	0.199	1.34	LS-102M2D--A3525
	1,200	25 × 45	2.89	0.15	0.166	1.47	LS-122M2D--A2545
	1,200	30 × 35	2.88	0.15	0.166	1.47	LS-122M2D--A3035
	1,200	35 × 30	2.97	0.15	0.166	1.47	LS-122M2D--A3530

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## Dimension and Permissible Ripple Current

Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
<b>200</b>	1,500	25 × 55	3.41	0.15	0.133	1.50	LS-152M2D--A2555
	1,500	30 × 45	3.46	0.15	0.133	1.50	LS-152M2D--A3045
	1,500	35 × 35	3.42	0.15	0.133	1.50	LS-152M2D--A3535
	1,800	30 × 50	3.97	0.15	0.111	1.50	LS-182M2D--A3050
	1,800	35 × 40	3.95	0.15	0.111	1.50	LS-182M2D--A3540
	2,200	30 × 60	4.51	0.15	0.090	1.50	LS-222M2D--A3060
	2,200	35 × 45	4.35	0.15	0.090	1.50	LS-222M2D--A3545
	2,200	40 × 40	4.48	0.15	0.090	1.50	LS-222M2D--A4040
	2,700	35 × 55	4.79	0.15	0.074	1.50	LS-272M2D--A3555
	2,700	40 × 50	5.00	0.15	0.074	1.50	LS-272M2D--A4050
	3,300	35 × 65	5.69	0.15	0.060	1.50	LS-332M2D--A3565
	3,300	40 × 60	5.90	0.15	0.060	1.50	LS-332M2D--A4060
	3,900	35 × 80	6.30	0.15	0.051	1.50	LS-392M2D--A3580
	3,900	40 × 60	5.97	0.15	0.051	1.50	LS-392M2D--A4060
	4,700	35 × 90	7.10	0.15	0.042	1.50	LS-472M2D--A3590
	4,700	40 × 70	6.77	0.15	0.042	1.50	LS-472M2D--A4070
	5,600	35 × 100	7.36	0.15	0.036	1.50	LS-562M2D--A35A0
6,800	40 × 100	8.65	0.15	0.029	1.50	LS-682M2D--A40A0	
<b>250</b>	180	22 × 25	1.01	0.15	1.106	0.64	LS-181M2E--A2225
	220	22 × 25	1.18	0.15	0.905	0.70	LS-221M2E--A2225
	220	25 × 25	1.24	0.15	0.905	0.70	LS-221M2E--A2525
	270	22 × 25	1.21	0.15	0.737	0.78	LS-271M2E--A2225
	270	25 × 25	1.49	0.15	0.737	0.78	LS-271M2E--A2525
	330	22 × 30	1.58	0.15	0.603	0.86	LS-331M2E--A2230
	330	25 × 25	1.53	0.15	0.603	0.86	LS-331M2E--A2525
	330	30 × 25	1.59	0.15	0.603	0.86	LS-331M2E--A3025
	390	22 × 30	1.57	0.15	0.510	0.94	LS-391M2E--A2230
	390	25 × 25	1.57	0.15	0.510	0.94	LS-391M2E--A2525
	390	30 × 25	1.77	0.15	0.510	0.94	LS-391M2E--A3025
	470	22 × 35	1.72	0.15	0.423	1.03	LS-471M2E--A2235
	470	25 × 30	1.73	0.15	0.423	1.03	LS-471M2E--A2530
	470	30 × 25	1.80	0.15	0.423	1.03	LS-471M2E--A3025
	560	22 × 45	2.12	0.15	0.355	1.12	LS-561M2E--A2245
	560	25 × 35	2.04	0.15	0.355	1.12	LS-561M2E--A2535
	560	30 × 25	2.01	0.15	0.355	1.12	LS-561M2E--A3025
	560	35 × 25	2.21	0.15	0.355	1.12	LS-561M2E--A3525
	680	22 × 50	2.48	0.15	0.293	1.24	LS-681M2E--A2250
	680	25 × 45	2.54	0.15	0.293	1.24	LS-681M2E--A2545
	680	30 × 30	2.38	0.15	0.293	1.24	LS-681M2E--A3030
	680	35 × 30	2.54	0.15	0.293	1.24	LS-681M2E--A3530
	820	25 × 50	2.92	0.15	0.243	1.36	LS-821M2E--A2550
	820	30 × 35	2.78	0.15	0.243	1.36	LS-821M2E--A3035
	820	35 × 30	2.87	0.15	0.243	1.36	LS-821M2E--A3530
	1,000	25 × 55	3.06	0.15	0.199	1.50	LS-102M2E--A2555
	1,000	30 × 45	3.11	0.15	0.199	1.50	LS-102M2E--A3045
	1,000	35 × 35	3.06	0.15	0.199	1.50	LS-102M2E--A3535
	1,200	25 × 60	3.33	0.15	0.166	1.50	LS-122M2E--A2560
	1,200	30 × 50	3.39	0.15	0.166	1.50	LS-122M2E--A3050
	1,200	35 × 35	3.20	0.15	0.166	1.50	LS-122M2E--A3535
	1,500	30 × 60	4.06	0.15	0.133	1.50	LS-152M2E--A3060
	1,500	35 × 45	3.92	0.15	0.133	1.50	LS-152M2E--A3545
1,500	40 × 40	4.04	0.15	0.133	1.50	LS-152M2E--A4040	
1,800	30 × 65	4.27	0.15	0.111	1.50	LS-182M2E--A3065	
1,800	35 × 50	4.15	0.15	0.111	1.50	LS-182M2E--A3550	
1,800	40 × 50	4.50	0.15	0.111	1.50	LS-182M2E--A4050	
2,200	35 × 60	4.92	0.15	0.090	1.50	LS-222M2E--A3560	
2,200	40 × 60	5.30	0.15	0.090	1.50	LS-222M2E--A4060	
2,700	35 × 90	5.40	0.15	0.074	1.50	LS-272M2E--A3590	
2,700	40 × 80	6.30	0.15	0.074	1.50	LS-272M2E--A4080	
3,300	35 × 90	6.10	0.15	0.060	1.50	LS-332M2E--A3590	
3,300	40 × 80	7.00	0.15	0.060	1.50	LS-332M2E--A4080	
3,900	35 × 100	7.47	0.15	0.051	1.50	LS-392M2E--A35A0	
4,700	40 × 100	8.88	0.15	0.042	1.50	LS-472M2E--A40A0	

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## Dimension and Permissible Ripple Current

Working Voltage V DC	Capacitance 120Hz, 20°C µF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
350	82	20 × 20	0.58	0.15	2.427	0.51	LS-820M2V--A2020
	82	22 × 25	0.70	0.15	2.427	0.51	LS-820M2V--A2225
	100	20 × 25	0.70	0.15	1.990	0.56	LS-101M2V--A2025
	100	22 × 25	0.77	0.15	1.990	0.56	LS-101M2V--A2225
	100	25 × 20	0.73	0.15	1.990	0.56	LS-101M2V--A2520
	120	20 × 30	0.95	0.15	1.659	0.61	LS-121M2V--A2030
	120	22 × 25	0.99	0.15	1.659	0.61	LS-121M2V--A2225
	120	25 × 20	0.80	0.15	1.659	0.61	LS-121M2V--A2520
	150	20 × 35	1.05	0.15	1.327	0.69	LS-151M2V--A2035
	150	25 × 25	1.16	0.15	1.327	0.69	LS-151M2V--A2525
	150	30 × 25	1.24	0.15	1.327	0.69	LS-151M2V--A3025
	180	20 × 35	1.08	0.15	1.106	0.75	LS-181M2V--A2035
	180	22 × 35	1.28	0.15	1.106	0.75	LS-181M2V--A2235
	180	25 × 30	1.30	0.15	1.106	0.75	LS-181M2V--A2530
	180	30 × 25	1.37	0.15	1.106	0.75	LS-181M2V--A3025
	220	20 × 45	1.36	0.15	0.905	0.83	LS-221M2V--A2045
	220	22 × 40	1.40	0.15	0.905	0.83	LS-221M2V--A2240
	220	25 × 30	1.28	0.15	0.905	0.83	LS-221M2V--A2530
	220	30 × 25	1.47	0.15	0.905	0.83	LS-221M2V--A3025
	270	22 × 45	1.62	0.15	0.737	0.92	LS-271M2V--A2245
	270	25 × 35	1.65	0.15	0.737	0.92	LS-271M2V--A2535
	270	30 × 30	1.71	0.15	0.737	0.92	LS-271M2V--A3030
	270	35 × 25	1.72	0.15	0.737	0.92	LS-271M2V--A3525
	330	22 × 50	1.89	0.15	0.603	1.02	LS-331M2V--A2250
	330	25 × 40	1.84	0.15	0.603	1.02	LS-331M2V--A2540
	330	30 × 30	1.74	0.15	0.603	1.02	LS-331M2V--A3030
	330	35 × 25	1.77	0.15	0.603	1.02	LS-331M2V--A3525
	390	25 × 45	2.04	0.15	0.510	1.11	LS-391M2V--A2545
	390	30 × 35	2.12	0.15	0.510	1.11	LS-391M2V--A3035
	390	35 × 30	2.19	0.15	0.510	1.11	LS-391M2V--A3530
	470	30 × 40	2.41	0.15	0.423	1.22	LS-471M2V--A3040
	470	35 × 30	2.25	0.15	0.423	1.22	LS-471M2V--A3530
	560	30 × 45	2.60	0.15	0.355	1.33	LS-561M2V--A3045
	560	35 × 35	2.62	0.15	0.355	1.33	LS-561M2V--A3535
	680	35 × 40	2.80	0.15	0.293	1.46	LS-681M2V--A3540
	820	35 × 45	3.35	0.15	0.243	1.50	LS-821M2V--A3545
400	68	20 × 25	0.66	0.15	2.927	0.49	LS-680M2G--A2025
	68	22 × 25	0.72	0.15	2.927	0.49	LS-680M2G--A2225
	82	20 × 25	0.72	0.15	2.427	0.54	LS-820M2G--A2025
	82	22 × 25	0.80	0.15	2.427	0.54	LS-820M2G--A2225
	100	20 × 25	0.75	0.15	1.990	0.60	LS-101M2G--A2025
	100	22 × 25	0.81	0.15	1.990	0.60	LS-101M2G--A2225
	100	25 × 20	0.79	0.15	1.990	0.60	LS-101M2G--A2520
	120	22 × 30	1.04	0.15	1.659	0.66	LS-121M2G--A2230
	120	25 × 25	1.06	0.15	1.659	0.66	LS-121M2G--A2525
	150	20 × 35	1.00	0.15	1.327	0.66	LS-151M2G--A2035
	150	22 × 30	1.06	0.15	1.327	0.73	LS-151M2G--A2230
	150	25 × 25	1.06	0.15	1.327	0.73	LS-151M2G--A2525
	150	30 × 25	1.24	0.15	1.327	0.73	LS-151M2G--A3025
	180	20 × 40	1.17	0.15	1.106	0.80	LS-181M2G--A2040
	180	22 × 35	1.16	0.15	1.106	0.80	LS-181M2G--A2235
	180	25 × 30	1.23	0.15	1.106	0.80	LS-181M2G--A2530
	180	30 × 25	1.45	0.15	1.106	0.80	LS-181M2G--A3025
	180	35 × 25	1.54	0.15	1.106	0.80	LS-181M2G--A3525
	220	20 × 45	1.39	0.15	0.905	0.89	LS-221M2G--A2045
	220	22 × 40	1.39	0.15	0.905	0.89	LS-221M2G--A2240
	220	25 × 30	1.33	0.15	0.905	0.89	LS-221M2G--A2530
	220	30 × 25	1.38	0.15	0.905	0.89	LS-221M2G--A3025
	220	35 × 25	1.44	0.15	0.905	0.89	LS-221M2G--A3525
	270	22 × 45	1.54	0.15	0.737	0.99	LS-271M2G--A2245
	270	25 × 35	1.48	0.15	0.737	0.99	LS-271M2G--A2535
	270	30 × 30	1.56	0.15	0.737	0.99	LS-271M2G--A3030
	270	35 × 25	1.53	0.15	0.737	0.99	LS-271M2G--A3525
	330	22 × 50	1.70	0.15	0.603	1.09	LS-331M2G--A2250
	330	25 × 45	1.76	0.15	0.603	1.09	LS-331M2G--A2545
	330	30 × 35	1.76	0.15	0.603	1.09	LS-331M2G--A3035

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## Dimension and Permissible Ripple Current

Working Voltage V. DC	Capacitance 120Hz, 20°C μF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
400	330	35 × 25	1.68	0.15	0.603	1.09	LS-331M2G--A3525
	390	25 × 45	1.86	0.15	0.510	1.18	LS-391M2G--A2545
	390	30 × 35	1.89	0.15	0.510	1.18	LS-391M2G--A3035
	390	35 × 30	1.97	0.15	0.510	1.18	LS-391M2G--A3530
	470	25 × 55	2.26	0.15	0.423	1.30	LS-471M2G--A2555
	470	30 × 40	2.18	0.15	0.423	1.30	LS-471M2G--A3040
	470	35 × 30	2.12	0.15	0.423	1.30	LS-471M2G--A3530
	470	40 × 25	2.16	0.15	0.423	1.30	LS-471M2G--A4025
	560	30 × 45	2.37	0.15	0.355	1.42	LS-561M2G--A3045
	560	35 × 35	2.34	0.15	0.355	1.42	LS-561M2G--A3535
	680	30 × 55	2.85	0.15	0.293	1.50	LS-681M2G--A3055
	680	35 × 40	2.72	0.15	0.293	1.50	LS-681M2G--A3540
	680	40 × 35	2.79	0.15	0.293	1.50	LS-681M2G--A4035
	820	30 × 60	3.25	0.15	0.243	1.50	LS-821M2G--A3060
	820	35 × 50	3.28	0.15	0.243	1.50	LS-821M2G--A3550
	820	40 × 40	3.23	0.15	0.243	1.50	LS-821M2G--A4040
	1,000	35 × 55	3.77	0.15	0.199	1.50	LS-102M2G--A3555
	1,000	40 × 45	3.75	0.15	0.199	1.50	LS-102M2G--A4045
	1,200	35 × 65	4.50	0.15	0.166	1.50	LS-122M2G--A3565
	1,200	40 × 60	4.68	0.15	0.166	1.50	LS-122M2G--A4060
1,500	35 × 80	5.51	0.15	0.133	1.50	LS-152M2G--A3580	
1,500	40 × 70	5.60	0.15	0.133	1.50	LS-152M2G--A4070	
1,800	40 × 80	6.50	0.15	0.111	1.50	LS-182M2G--A4080	
420	220	22 × 45	1.38	0.15	0.905	0.91	LS-221M2P--A2245
	220	25 × 35	1.33	0.15	0.905	0.91	LS-221M2P--A2535
	330	25 × 50	1.90	0.15	0.603	1.12	LS-331M2P--A2550
	330	30 × 40	1.99	0.15	0.603	1.12	LS-331M2P--A3040
	470	35 × 35	2.37	0.15	0.423	1.33	LS-471M2P--A3535
	560	30 × 50	2.73	0.15	0.355	1.45	LS-561M2P--A3050
	560	35 × 40	2.73	0.15	0.355	1.45	LS-561M2P--A3540
	680	35 × 45	3.16	0.15	0.293	1.50	LS-681M2P--A3545
	680	40 × 50	3.70	0.15	0.293	1.50	LS-681M2P--A4050
	820	35 × 55	3.69	0.15	0.243	1.50	LS-821M2P--A3555
	820	40 × 45	3.66	0.15	0.243	1.50	LS-821M2P--A4045
	1,000	35 × 65	4.48	0.15	0.199	1.50	LS-102M2P--A3565
	1,000	40 × 50	4.27	0.15	0.199	1.50	LS-102M2P--A4050
	1,200	35 × 70	4.90	0.15	0.166	1.50	LS-122M2P--A3570
	1,200	40 × 55	4.76	0.15	0.166	1.50	LS-122M2P--A4055
	1,500	40 × 70	5.90	0.15	0.133	1.50	LS-152M2P--A4070
	1,800	40 × 80	6.86	0.15	0.111	1.50	LS-182M2P--A4080
450	56	20 × 25	0.57	0.15	3.554	0.48	LS-560M2W--A2025
	56	22 × 25	0.68	0.15	3.554	0.48	LS-560M2W--A2225
	68	20 × 25	0.62	0.15	2.927	0.52	LS-680M2W--A2025
	68	22 × 20	0.58	0.15	2.927	0.52	LS-680M2W--A2220
	82	20 × 30	0.74	0.15	2.427	0.58	LS-820M2W--A2030
	82	22 × 25	0.69	0.15	2.427	0.58	LS-820M2W--A2225
	82	25 × 25	0.75	0.15	2.427	0.58	LS-820M2W--A2525
	100	20 × 30	0.78	0.15	1.990	0.64	LS-101M2W--A2030
	100	22 × 25	0.77	0.15	1.990	0.64	LS-101M2W--A2225
	100	25 × 25	0.83	0.15	1.990	0.64	LS-101M2W--A2525
	120	20 × 35	0.92	0.15	1.659	0.70	LS-121M2W--A2035
	120	22 × 35	0.97	0.15	1.659	0.70	LS-121M2W--A2235
	120	25 × 25	0.91	0.15	1.659	0.70	LS-121M2W--A2525
	120	30 × 25	1.10	0.15	1.659	0.70	LS-121M2W--A3025
	150	20 × 40	1.06	0.15	1.327	0.78	LS-151M2W--A2040
	150	22 × 35	1.20	0.15	1.327	0.78	LS-151M2W--A2235
	150	25 × 30	1.16	0.15	1.327	0.78	LS-151M2W--A2530
	150	30 × 25	1.16	0.15	1.327	0.78	LS-151M2W--A3025
	180	20 × 45	1.21	0.15	1.106	0.85	LS-181M2W--A2045
	180	22 × 40	1.21	0.15	1.106	0.85	LS-181M2W--A2240
	180	25 × 35	1.31	0.15	1.106	0.85	LS-181M2W--A2535
	180	30 × 25	1.19	0.15	1.106	0.85	LS-181M2W--A3025
180	35 × 25	1.35	0.15	1.106	0.85	LS-181M2W--A3525	
220	22 × 50	1.48	0.15	0.905	0.94	LS-221M2W--A2250	
220	25 × 40	1.47	0.15	0.905	0.94	LS-221M2W--A2540	

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## Dimension and Permissible Ripple Current

Working Voltage V DC	Capacitance 120Hz, 20°C µF	φ D×L mm	Ripple Current 120 Hz, 85°C A/rms	Tan δ at 120Hz, 20°C	ESR 120Hz, 20°C Ω	LC 5 minutes mA	Part Number
450	220	30 × 30	1.42	0.15	0.905	0.94	LS-221M2W--A3030
	220	35 × 25	1.45	0.15	0.905	0.94	LS-221M2W--A3525
	270	22 × 55	1.71	0.15	0.737	1.05	LS-271M2W--A2255
	270	25 × 45	1.59	0.15	0.737	1.05	LS-271M2W--A2545
	270	30 × 35	1.65	0.15	0.737	1.05	LS-271M2W--A3035
	270	35 × 25	1.61	0.15	0.737	1.05	LS-271M2W--A3525
	330	25 × 50	1.76	0.15	0.603	1.16	LS-331M2W--A2550
	330	30 × 40	1.93	0.15	0.603	1.16	LS-331M2W--A3040
	330	35 × 30	1.88	0.15	0.603	1.16	LS-331M2W--A3530
	390	25 × 55	2.08	0.15	0.510	1.26	LS-391M2W--A2555
	390	30 × 40	2.00	0.15	0.510	1.26	LS-391M2W--A3040
	390	35 × 30	1.95	0.15	0.510	1.26	LS-391M2W--A3530
	470	30 × 45	2.35	0.15	0.423	1.38	LS-471M2W--A3045
	470	35 × 40	2.45	0.15	0.423	1.38	LS-471M2W--A3540
	560	30 × 55	2.76	0.15	0.355	1.50	LS-561M2W--A3055
	560	35 × 40	2.63	0.15	0.355	1.50	LS-561M2W--A3540
	680	35 × 50	2.91	0.15	0.293	1.50	LS-681M2W--A3550
	680	40 × 40	2.98	0.15	0.293	1.50	LS-681M2W--A4040
	820	35 × 55	3.86	0.15	0.243	1.50	LS-821M2W--A3555
	820	40 × 50	4.00	0.15	0.243	1.50	LS-821M2W--A4050
	1,000	35 × 70	4.74	0.15	0.199	1.50	LS-102M2W--A3570
	1,000	40 × 55	4.60	0.15	0.199	1.50	LS-102M2W--A4055
	1,200	35 × 80	5.51	0.15	0.166	1.50	LS-122M2W--A3580
1,200	40 × 65	5.42	0.15	0.166	1.50	LS-122M2W--A4065	
1,500	35 × 100	5.99	0.15	0.133	1.50	LS-152M2W--A35A0	
2,200	45 × 90	8.48	0.15	0.090	1.50	LS-222M2W--A4590	
500	56	20 × 25	0.54	0.15	3.554	0.50	LS-560M2H--A2025
	56	22 × 25	0.57	0.15	3.554	0.50	LS-560M2H--A2225
	68	20 × 30	0.65	0.15	2.927	0.55	LS-680M2H--A2030
	68	22 × 25	0.63	0.15	2.927	0.55	LS-680M2H--A2225
	68	25 × 20	0.62	0.15	2.927	0.55	LS-680M2H--A2520
	82	20 × 30	0.71	0.15	2.427	0.61	LS-820M2H--A2030
	82	22 × 30	0.75	0.15	2.427	0.61	LS-820M2H--A2230
	82	25 × 25	0.75	0.15	2.427	0.61	LS-820M2H--A2525
	100	22 × 35	0.85	0.15	1.990	0.67	LS-101M2H--A2235
	100	25 × 30	0.86	0.15	1.990	0.67	LS-101M2H--A2530
	100	30 × 20	0.82	0.15	1.990	0.67	LS-101M2H--A3020
	120	22 × 40	0.98	0.15	1.659	0.73	LS-121M2H--A2240
	120	25 × 30	0.94	0.15	1.659	0.73	LS-121M2H--A2530
	120	30 × 30	1.04	0.15	1.659	0.73	LS-121M2H--A3030
	120	35 × 25	1.07	0.15	1.659	0.73	LS-121M2H--A3525
	150	22 × 45	1.16	0.15	1.327	0.73	LS-151M2H--A2245
	150	25 × 35	1.12	0.15	1.327	0.82	LS-151M2H--A2535
	150	30 × 30	1.17	0.15	1.327	0.82	LS-151M2H--A3030
	150	35 × 25	1.20	0.15	1.327	0.82	LS-151M2H--A3525
	180	22 × 50	1.33	0.15	1.106	0.90	LS-181M2H--A2250
	180	25 × 40	1.30	0.15	1.106	0.90	LS-181M2H--A2540
	180	30 × 30	1.28	0.15	1.106	0.90	LS-181M2H--A3030
	180	35 × 20	1.21	0.15	1.106	0.90	LS-181M2H--A3520
	220	30 × 35	1.51	0.15	0.905	0.99	LS-221M2H--A3035
	220	35 × 30	1.55	0.15	0.905	0.99	LS-221M2H--A3530
	270	30 × 40	1.77	0.15	0.737	1.10	LS-271M2H--A3040
	270	35 × 35	1.83	0.15	0.737	1.10	LS-271M2H--A3530
	330	30 × 50	2.15	0.15	0.603	1.22	LS-331M2H--A3050
	330	35 × 35	2.03	0.15	0.603	1.22	LS-331M2H--A3535
	390	35 × 45	2.44	0.15	0.510	1.32	LS-391M2H--A3545
	470	35 × 50	2.80	0.15	0.423	1.45	LS-471M2H--A3550
	560	35 × 60	3.37	0.15	0.355	1.50	LS-561M2H--A3560
	560	40 × 50	3.31	0.15	0.355	1.50	LS-561M2H--A4050
	680	35 × 70	3.91	0.15	0.293	1.50	LS-681M2H--A3570
	680	40 × 55	3.79	0.15	0.293	1.50	LS-681M2H--A4055
	820	35 × 80	4.56	0.15	0.243	1.50	LS-821M2H--A3580
820	40 × 60	4.33	0.15	0.243	1.50	LS-821M2H--A4060	
1,000	35 × 90	5.31	0.15	0.199	1.50	LS-102M2H--A3590	
1,000	40 × 80	5.42	0.15	0.199	1.50	LS-102M2H--A4080	
1,500	40 × 100	6.56	0.15	0.133	1.50	LS-152M2H--A40A0	

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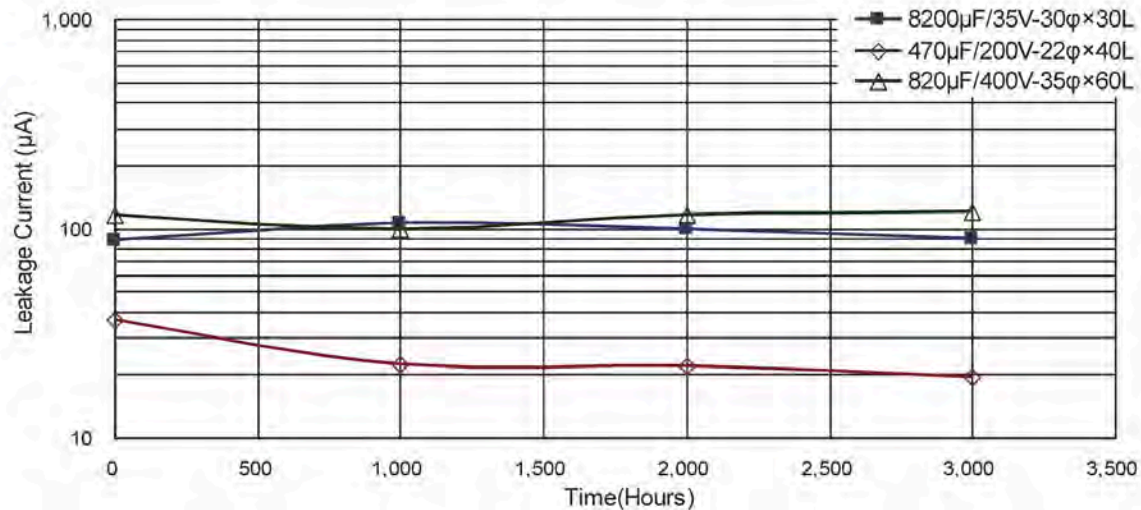
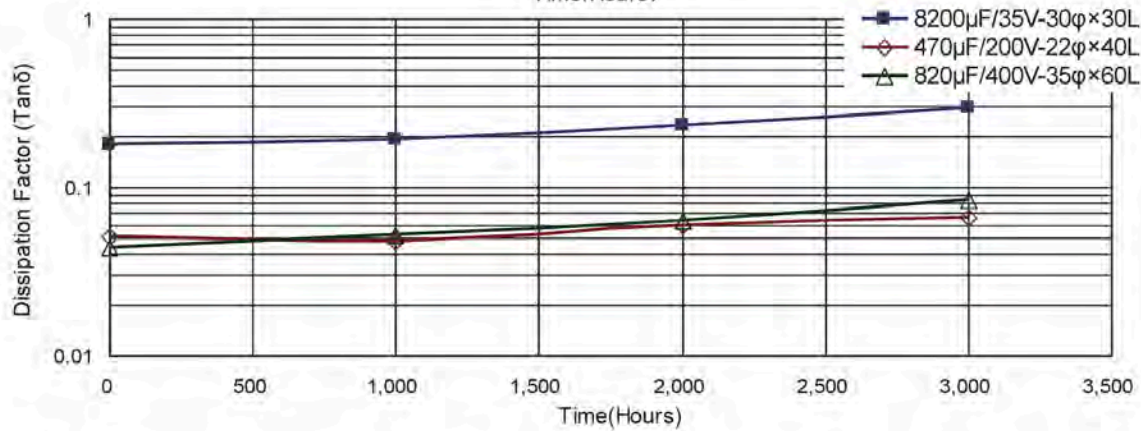
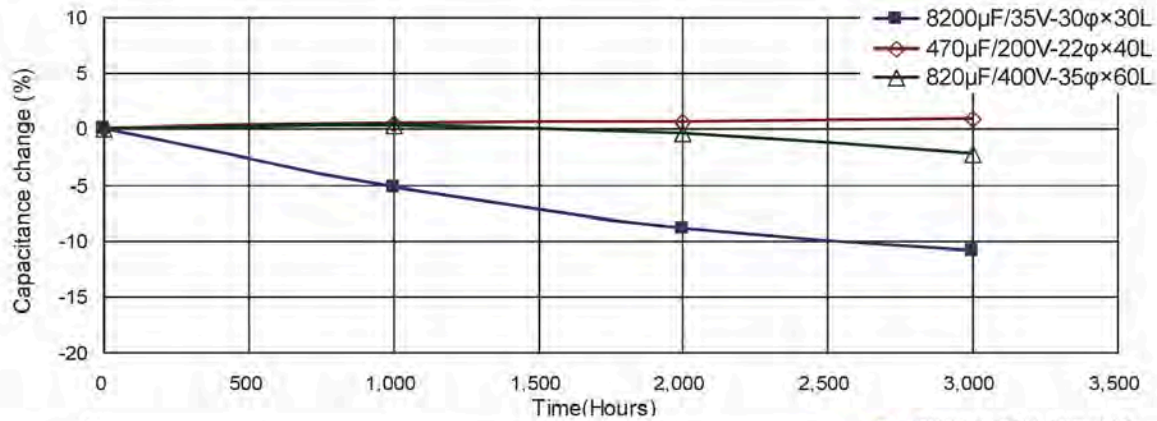


## Part Numbering System

LS Series	100 $\mu$ F	$\pm 20\%$	400V	4.0 $\pm 0.5$ mm	22 $\phi$ $\times$ 30L	Pb-free Terminal + PET Sleeve	
<b>LS-</b>	<b>101</b>	<b>M</b>	<b>2G</b>	--	<b>A</b>	<b>2230</b>	
Series Name	Capacitance	Capacitance tolerance	Rated voltage	Terminal type	Terminal length	Case size	Terminal and Sleeve Type
Example:	Example:	Example:	Example:	Example:	Example:	Example:	Example:
Cap.	Symbol	M = $\pm 20\%$ K = $\pm 10\%$	WV	Symbol	Symbol	$\phi$ D $\times$ L	Code
56	560		400	2G	--	22 $\times$ 30	2230
220	221		450	2W	L5	25 $\times$ 25	2525
470	471					30 $\times$ 40	3040

Note: For more details, please refer to "Part Numbering System (Snap-in Type)"

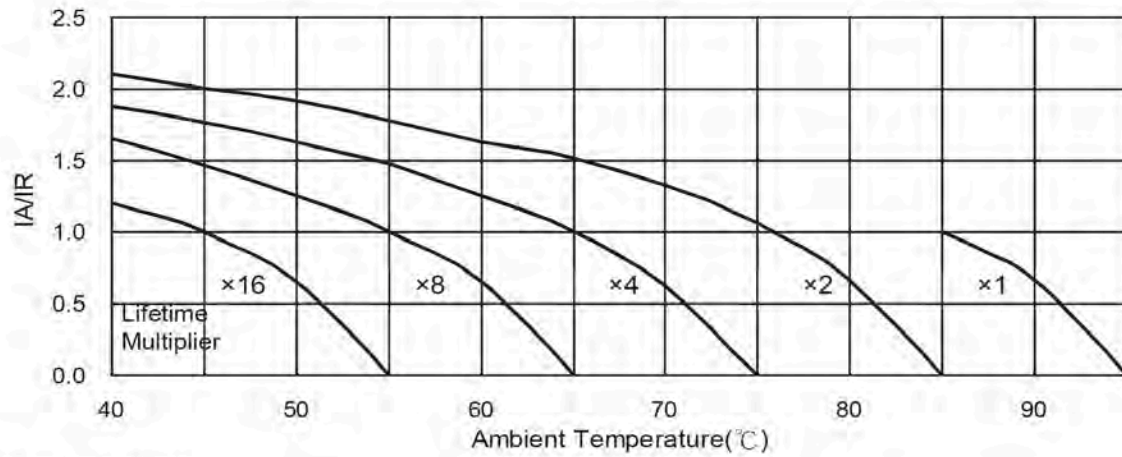
## Typical Endurance Curves



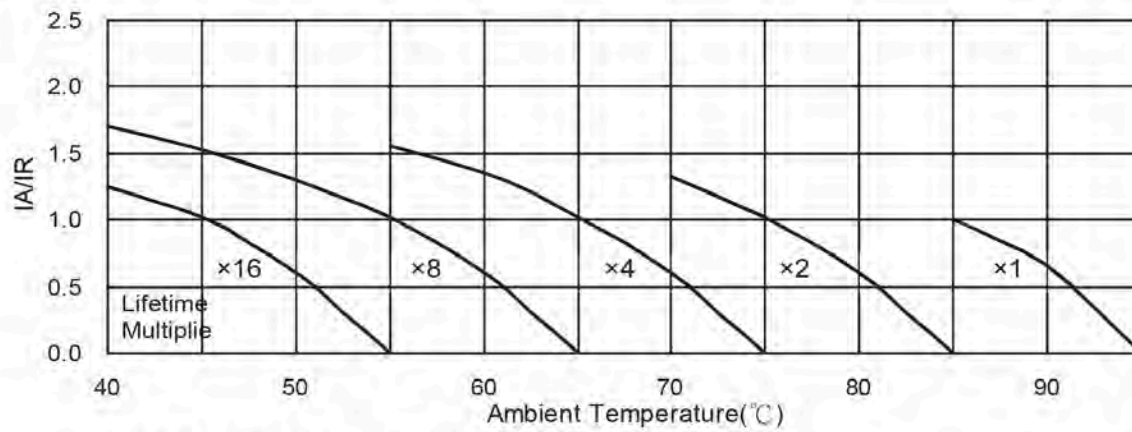
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## Useful Life Chart

Rated Voltage  $\leq 100V$



Rated Voltage  $\leq 160V$



IA: Actual ripple current      IR: Rated ripple current