



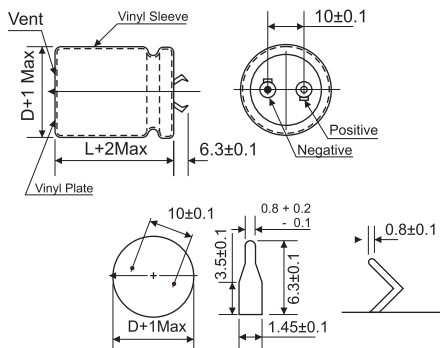
■ FEATURES

- Has a snap-in terminal which can be soldered to a PCB directly and not need fixture to save processing time.
- Suitable for electronic equipment with medium-high voltage circuits. Printed circuit board terminal snap-in type and lug terminal type available.
- 3,000 hour life

■ SPECIFICATIONS

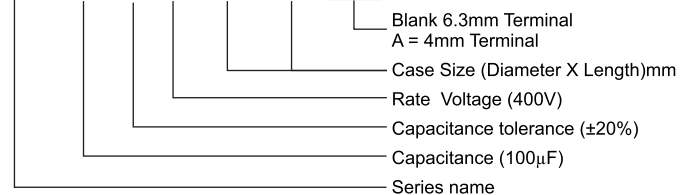
Items	Performance																																														
Operating Temperature Range	16V ~ 100V	160V ~ 500V																																													
	-40°C ~ +105°C	-25°C ~ +105°C																																													
Capacitance Tolerance	±20% (at 120Hz, 20°C)																																														
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 rated voltage in V.																																														
Dissipation Factor (Tan δ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th><th>160</th><th>200</th><th>250</th><th>350</th><th>400</th><th>420</th><th>450</th><th>500</th> </tr> </thead> <tbody> <tr> <td>Tan δ (max)</td> <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>0.10*</td><td>0.10*</td><td>0.10*</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td><td>0.15</td> </tr> </tbody> </table>														Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500	Tan δ (max)	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.10*	0.10*	0.10*	0.15	0.15	0.15	0.15	0.15	
	Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500																															
Tan δ (max)	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.10*	0.10*	0.10*	0.15	0.15	0.15	0.15	0.15																																
*: 0.15 for D = 35mm																																															
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.																																														
	Impedance Ratio	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>80</th><th>100</th><th>160</th><th>200</th><th>250</th><th>350</th><th>400</th><th>420</th><th>450</th><th>500</th> </tr> </thead> <tbody> <tr> <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>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> </tbody> </table>														Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500	Z (-25°C)/Z (+20°C)	4	3	3	2	2	2	2	4	4	4	4	8	8	8	8
		Rated Voltage	16	25	35	50	63	80	100	160	200	250	350	400	420	450	500																														
Z (-25°C)/Z (+20°C)	4	3	3	2	2	2	2	4	4	4	4	8	8	8	8																																
Z (-40°C)/Z (+20°C)	15	10	8	6	6	6	5	--	--	--	--	--	--	--	--																																
Endurance	Test Time		3,000 hours																																												
	Capacitance Change		Within ±20% of initial value																																												
	Tan		Less than 200% of specified value																																												
	Leakage Current		Within specified value																																												
** The above specifications shall be satisfied when the capacitors are restored at 20°C after the rated voltage applied with rated ripple current for 3,000 hours at 105°C																																															
Shelf Life Test	Test Time		1,000 hours																																												
	Capacitance Change		Within ±20% of initial value																																												
	Tan		Less than 150% of specified value																																												
	Leakage Current		Within specified value																																												
** The above specifications shall be satisfied when the capacitors are restored at 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements.																																															
Ripple Current & Frequency Multipliers	Frequency (Hz)		50 / 60		100 / 120		300		1k		10k up																																				
	Multiplier		0.8		1.0		1.1		1.3		1.4																																				
Failure percentage Failure rate	When the failure percentage / failure rate is required, please contact us for further discussion.																																														

■ SNAP-IN TERMINAL TYPE



■ PART NUMBER EXAMPLE

LSM 101 M 2G 220 300



■ DIMENSIONS & PERMISSIBLE RIPPLE CURRENT

		16V(1C)											
		22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
4,700	472	22 x 25	1.3	0.141									
6,800	682	22 x 35	1.8	0.098	25 x 30	1.8	0.098						
10,000	103	22 x 45	2.34	0.066	25 x 35	2.25	0.066	30 x 25	2.19	0.066			
15,000	153				25 x 45	2.83	0.044	30 x 35	2.82	0.044	35 x 30	2.82	0.44
22,000	223							30 x 45	3.13	0.03	35 x 30	3.09	0.03

		25V(1E)											
		22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
3,300	332	22 x 25	1.25	0.181									
4,700	472	22 x 30	1.61	0.127	25 x 25	1.61	0.127						
6,800	682	22 x 35	1.91	0.088	25 x 30	1.91	0.088	30 x 25	1.91	0.088			
10,000	103	22 x 45	2.51	0.06	25 x 40	2.42	0.06	30 x 30	2.42	0.06	35 x 25	2.42	0.06
15,000	153				25 x 45	3.12	0.04	30 x 35	3.11	0.04	35 x 30	3.11	0.04
22,000	223							30 x 45	3.85	0.027	35 x 40	3.85	0.027

		35V(1V)											
		22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
2,200	222	22 x 25	1.14	0.241	25 x 25	1.51	0.241						
3,300	332	22 x 30	1.51	0.161	25 x 30	1.92	0.161						
4,700	472	22 x 35	1.92	0.113	25 x 40	2.31	0.113	30 x 25	1.92	0.113			
6,800	682	22 x 45	2.31	0.078	25 x 45	2.87	0.078	30 x 30	2.33	0.078	35 x 25	2.33	0.078
10,000	103							30 x 35	2.87	0.053	35 x 30	2.87	0.053
15,000	153							30 x 45	3.66	0.035	35 x 40	3.66	0.035
22,000	223										35 x 45	3.85	0.027

		50V(1H)											
		22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
1,500	152	22 x 25	1.22	0.31									
2,200	222	22 x 30	1.59	0.211	25 x 25	1.59	0.211						
3,300	332	22 x 35	1.93	0.141	25 x 30	1.88	0.141	30 x 25	1.88	0.141			
4,700	472	22 x 45	2.43	0.099	25 x 35	2.34	0.099	30 x 30	2.42	0.099	35 x 25	2.42	0.099
6,800	682				25 x 45	3.1	0.068	30 x 35	3.1	0.068	35 x 30	3.1	0.068
10,000	103							30 x 45	4.18	0.046	35 x 40	4.2	0.046

		63V(1J)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
1,000	102	20 x 20	0.9	0.398	22 x 20	0.9	0.398									
1,200	122	20 x 25	1.08	0.332	22 x 20	1.05	0.332									
1,500	152	20 x 30	1.31	0.265	22 x 25	1.28	0.265	25 x 20	1.17	0.265						
2,200	222	20 x 35	1.7	0.181	22 x 35	1.78	0.181	25 x 25	1.6	0.181	30 x 25	1.78	0.181			
2,700	272	20 x 40	1.82	0.147	22 x 35	1.81	0.147	25 x 30	1.83	0.147	30 x 25	1.89	0.147			
3,300	332	20 x 45	2	0.121	22 x 40	2	0.121	25 x 35	2.03	0.121	30 x 25	1.81	0.121	35 x 25	2.03	0.121
3,900	392	20 x 50	2.16	0.102	22 x 50	2.37	0.102	25 x 40	2.22	0.102	30 x 30	2.19	0.102	35 x 25	2.24	0.102
4,700	472							25 x 45	2.56	0.085	30 x 35	2.66	0.085	35 x 25	2.46	0.085
5,600	562							25 x 50	2.93	0.071	30 x 35	2.79	0.071	35 x 30	2.88	0.071
6,800	682										30 x 40	3.25	0.059	35 x 35	3.26	0.059
														35 x 40	3.49	0.059
8,200	822													35 x 40	3.52	0.049

		80V(1K)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
1,000	102				22 x 25	1.05	0.332	25 x 20	1.04	0.332						
1,200	122	20 x 30	1.17	0.276	22 x 30	1.24	0.276	25 x 25	1.24	0.276						
1,500	152	20 x 40	1.49	0.221	22 x 35	1.54	0.221	25 x 30	1.54	0.221	30 x 25	1.61	0.221			
2,200	222	20 x 50	1.94	0.151	22 x 45	1.95	0.151	25 x 35	1.94	0.151	30 x 30	2.05	0.151	35 x 25	2.1	0.151
3,300	332							25 x 50	2.25	0.101	30 x 35	2.24	0.101	35 x 30	2.3	0.101
4,700	472										30 x 45	2.84	0.071	35 x 35	2.8	0.071

		100V(2A)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
1,000	102	20 x 35	1.28	0.265	22 x 30	1.36	0.265	25 x 25	1.36	0.265						
1,200	122	20 x 40	1.49	0.221	22 x 35	1.48	0.221	25 x 30	1.49	0.221						
1,500	152	20 x 45	1.75	0.177	22 x 40	1.82	0.177	25 x 35	1.85	0.177	30 x 25	1.8	0.177			
2,200	222							25 x 45	2.5	0.121	30 x 35	2.5	0.121	35 x 30	2.5	0.121
2,700	272							25 x 50	2.7	0.098	30 x 40	2.72	0.098	35 x 35	2.82	0.098
3,300	332										30 x 45	3.11	0.08	35 x 35	3.07	0.08
3,900	392										30 x 50	3.4	0.068	35 x 40	3.38	0.068
4,700	472													35 x 45	3.9	0.056

		160V(2C)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	Ω	A/rms	Ω	D X L	A/rms	Ω
180	181	20 x 20	0.61	0.737												
220	221	20 x 25	0.73	.0.603	22 x 20	0.71	.0.603									
270	271	20 x 25	0.81	0.491				25 x 20	0.85	0.491						
330	331	20 x 30	0.97	0.402	22 x 25	0.98	0.402	25 x 20	0.94	0.402						
390	391	20 x 30	1.06	0.34	22 x 25	1.03	0.34	25 x 25	1.09	0.34						
470	471	20 x 35	1.17	0.282	22 x 30	1.21	0.282	25 x 25	1.19	0.282						
560	561	20 x 40	1.35	0.237	22 x 35	1.4	0.237	25 x 30	1.4	0.237	30 x 25	1.35	0.237			
680	681	20 x 45	1.57	0.195	22 x 40	1.62	0.195	25 x 35	1.61	0.195	30 x 25	1.54	0.195			
820	821				22 x 45	1.86	0.162	25 x 40	1.86	0.162	30 x 30	1.79	0.162	35 x 25	1.79	0.243
1,000	102				22 x 50	2.18	0.133	25 x 45	2.15	0.133	30 x 35	2.09	0.133	35 x 25	1.98	0.199
1,200	122							25 x 50	2.35	0.111	30 x 40	2.35	0.111	35 x 30	2.29	0.166
1,500	152										30 x 35	2.56	0.088	35 x 35	2.72	0.133
1,800	182										30 x 45	2.97	0.074	35 x 40	3.09	0.111
2,200	222										30 x 60	3.48	0.06	35 x 50	3.51	0.09
2,700	272													35 x 55	4.05	0.074

		200V(2D)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
180	181				22 x 20	0.7	0.737									
220	221	20 x 25	0.8	.0.603				25 x 20	0.84	.0.603						
270	271	20 x 30	0.96	0.491	22 x 25	1.03	0.491									
330	331				22 x 30	1.21	0.402									
390	391	20 x 35	1.24	0.34	22 x 35	1.39	0.34	25 x 25	1.31	0.34						
470	471	20 x 40	1.44	0.282	22 x 35	1.52	0.282	25 x 35	1.52	0.282						
560	561	20 x 50	1.74	0.237	22 x 40	1.66	0.237	25 x 35	1.75	0.237	30 x 25	1.64	0.237			
680	681				22 x 45	2.04	0.195	25 x 40	2.04	0.195	30 x 30	1.96	0.195			
820	821							25 x 45	2.34	0.162	30 x 35	2.27	0.162	35 x 25	1.99	0.243
1,000	102							25 x 50	2.26	0.133	30 x 40	2.63	0.133	35 x 30	2.51	0.199
1,200	122										30 x 45	3	0.111	35 x 35	2.92	0.166
1,500	152										30 x 50	3.36	0.088	35 x 40	3.34	0.133
1,800	182										30 x 60	3.64	0.074	35 x 45	3.51	0.111
2,200	222													35 x 55	4.01	0.09

		250V(2E)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
180	181				22 x 25	0.77	0.737									
220	221	20 x 30	0.87	..0.603												
270	271	20 x 35	1.03	0.491	22 x 30	1.02	0.491	25 x 25	1.08	0.491						
330	331	20 x 40	1.21	0.402	22 x 35	1.2	0.402	25 x 30	1.27	0.402						
390	391	20 x 50	1.45	0.34	22 x 40	1.38	0.34	25 x 35	1.46	0.34	30 x 25	1.39	0.34			
470	471				22 x 45	1.46	0.282	25 x 40	1.69	0.282	30 x 30	1.63	0.282			
560	561							5 x 45	1.93	0.237				35 x 25	1.78	0.355
680	681							25 x 50	2.04	0.195	30 x 35	2.06	0.195	35 x 30	2.06	0.293
820	821										30 x 45	2.48	0.162	35 x 35	2.41	0.243
1,000	102										30 x 50	2.65	0.133	35 x 40	2.76	0.199
1,200	122										30 x 60	3.15	0.111	35 x 45	3.14	0.166
1,800	182													35 x 60	3.97	0.111

		350V(2V)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
100	101	20 x 30	0.53	1.99	22 x 25	0.52	1.99	25 x 20	0.52	1.99						
120	121	20 x 35	0.63	1.659	22 x 30	0.62	1.659	25 x 25	0.65	1.659						
150	151	20 x 40	0.74	1.327	22 x 35	0.74	1.327									
180	181	20 x 45	0.81	1.106	22 x 40	0.81	1.106	25 x 30	0.77	1.106	30 x 25	0.8	1.106			
220	221	20 x 50	0.94	0.905	22 x 45	0.94	0.905	25 x 35	0.91	0.905						
270	271				22 x 50	1.09	0.737	25 x 40	1.06	0.737	30 x 30	1.05	0.737	35 x 25	1.08	0.737
330	331							25 x 45	1.24	0.603	30 x 35	1.24	0.603	35 x 30	1.33	0.603
390	391										30 x 40	1.42	0.51	35 x 30	1.39	0.51
470	471										30 x 45	1.56	0.423	35 x 35	1.53	0.423
560	561										30 x 50	1.78	0.355	35 x 40	1.73	0.355
680	681										30 x 60	1.94	0.293	35 x 50	1.95	0.293
820	821													35 x 55	2.23	0.243

		400V(2G)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
56	560				22 x 20	0.41	3.554									
68	680				22 x 25	0.52	2.927	25 x 20	0.49	2.927						
82	820	20 x 30	0.54	2.427												
100	101	20 x 35	0.64	1.99	22 x 30	0.67	1.99									
120	121	20 x 40	0.74	1.659	22 x 35	0.78	1.659	25 x 25	0.69	1.659						
150	151	20 x 45	0.87	1.327	22 x 40	0.91	1.327	25 x 30	0.83	1.327	30 x 25	0.86	1.327			
180	181				22 x 45	1.04	1.106	25 x 35	1.97	1.106						
220	221				22 x 50	1.17	0.905	25 x 40	1.14	0.905	30 x 30	1.12	0.905	35 x 25	1.15	0.905
270	271							25 x 50	1.4	0.737	30 x 35	1.31	0.737	35 x 30	1.31	0.737
330	331										30 x 40	1.39	0.603	35 x 30	1.34	0.603
390	391										30 x 45	1.49	0.51	35 x 35	1.47	0.51
470	471										30 x 50	1.72	0.423	35 x 40	1.71	0.423
560	561										30 x 60	2.03	0.355	35 x 45	2.23	0.355
680	681													35 x 55	2.31	0.293
820	821													35 x 60	2.54	0.243

		420V(2P)														
		20 Diameter			22 Diameter			25 Diameter			30 Diameter			35 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
56	560	20 x 25	0.41	3.554	22 x 20	0.4	3.554									
68	680	20 x 30	0.49	2.927	22 x 25	0.48	2.927									
82	820	20 x 30	0.54	2.427	22 x 25	0.53	2.427									
100	101	20 x 35	0.64	1.99	22 x 30	0.63	1.99	25 x 25	0.63	1.99						
120	121	20 x 40	0.74	1.659	22 x 35	0.74	1.659	25 x 30	0.78	1.659						
150	151	20 x 50	0.92	1.327	22 x 40	0.87	1.327				30 x 25	0.8	1.327			
180	181				22 x 45	0.93	1.106	25 x 30	0.9	1.106	30 x 30	0.98	1.106			
220	221							25 x 45	1.01	0.905	30 x 35	1.05	0.905	35 x 25	0.97	0.905
270	271							25 x 50	1.17	0.737	30 x 40	1.22	0.737	35 x 30	1.15	0.737
330	331										30 x 45	1.37	0.603	35 x 35	1.35	0.603
390	391										30 x 50	1.56	0.51	35 x 40	1.55	0.51
470	471										30 x 60	1.76	0.423	35 x 45	1.7	0.423
560	561													35 x 50	1.94	0.355
680	681													35 x 60	2.31	0.293

		450V(2W)														
		22 Diameter			22 Diameter			22 Diameter			22 Diameter			22 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
56	560	20 x 25	0.41	3.554												
82	820	20 x 30	0.54	2.427				25 x 25	0.57	2.427						
100	101	20 x 45	0.71	1.99	22 x 35	0.67	1.99									
120	121	20 x 50	0.82	1.659	22 x 40	0.78	1.659	25 x 30	0.74	1.659	30 x 25	0.77	1.659			
150	151				22 x 45	0.92	1.327	25 x 35	0.89	1.327	30 x 30	0.93	1.327	35 x 25	0.95	1.327
180	181				22 x 50	1.06	1.106	25 x 40	1.03	1.106	30 x 30	1.01	1.106	35 x 25	1.04	1.106
220	221							25 x 45	1.18	0.905	30 x 35	1.18	0.905	35 x 30	1.22	0.905
270	271							22 Diameter			30 x 40	1.17	0.737			
330	331										30 x 50	1.42	0.603	35 x 35	1.64	0.603
390	391													35 x 40	1.74	0.51
470	471													35 x 50	1.85	0.423
560	561													35 x 50	2.02	0.355

		500V(2H)											
		22 Diameter			22 Diameter			22 Diameter			22 Diameter		
μF	Code	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω	D X L	A/rms	Ω
56	560												
82	820	22 x 35	0.68	2.427	25 x 30	0.74	2.427						
100	101	22 x 40	0.79	1.99	25 x 40	0.85	1.99	3 x 35	1.2	1.99			
120	121	22 x 45	0.91	1.659	25 x 45	0.98	1.659						
150	151	22 x 50	1.07	1.327	25 x 55	1.2	1.327						
220	221							30 x 40	1.4	0.905			
270	271										35 x 35	1.61	0.737
330	331										35 x 40	1.88	0.603
390	391										35 x 45	2.15	0.51

■ **CHARACTERISTICS CURVES**

