



### FEATURES

- Has a snap-in terminal which can solder to a PCB directly and need not 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.

### SPECIFICATIONS

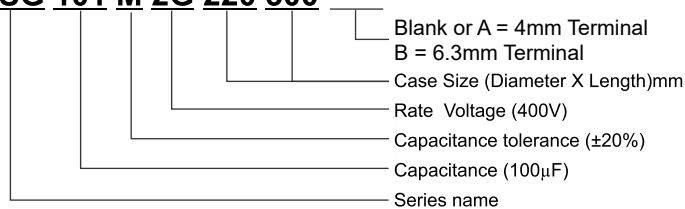
Items	Performance																																																			
	16 ~ 100V	160 ~ 500V																																																		
Category Temperature Range	-40°C ~ +105°C	-25°C ~ +105°C																																																		
Capacitance Tolerance	±20% (at 120 Hz, 20°C)																																																			
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																																																			
Tanδ (at 120 Hz, 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>Tanδ (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>0.15</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> </tbody> </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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Low Temperature Characteristics (at 120 Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th colspan="2">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 rowspan="2">Impedance Ratio</td> <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> <td>8</td> </tr> <tr> <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>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </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	8	Z(-40°C)/Z(+20°C)	15	10	8	6	5	5	4	-	-	-	-	-	-	-	-
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Ripple Current and Frequency Multipliers	<table border="1"> <thead> <tr> <th rowspan="2">Case size</th> <th colspan="2">Freq.(Hz)</th> <th rowspan="2">50 / 60</th> <th rowspan="2">100 / 120</th> <th rowspan="2">500</th> <th rowspan="2">1k</th> <th rowspan="2">10k up</th> </tr> <tr> <th colspan="2">Rated Volt. (V)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Length ≤ 55L</td> <td colspan="2">≤ 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 colspan="2">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 colspan="2">350 ≤</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 colspan="2">160 ~ 450</td> <td>0.88</td> <td>1.00</td> <td>1.20</td> <td>1.25</td> <td>1.40</td> </tr> </tbody> </table>		Case size	Freq.(Hz)		50 / 60	100 / 120	500	1k	10k up	Rated Volt. (V)		Length ≤ 55L	≤ 100		0.92	1.00	1.13	1.19	1.20	160 ~ 250		0.81	1.00	1.32	1.45	1.50	350 ≤		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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Failure percentage Failure rate	When the failure percentage / failure rate is required, please contact with us for further discussion.																																																			

### Diagram of Dimensions

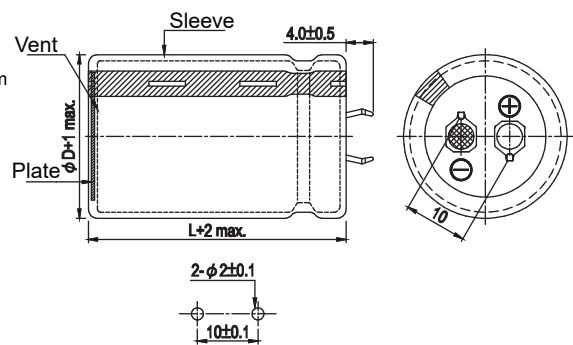
Unit: mm

### PART NUMBER EXAMPLE

**LSG 101 M 2G 220 300**



### SNAP-IN TERMINAL TYPE



PC board pin-out

**DIMENSION AND PERMISSIBLE RIPPLE CURRENT**  
 (DIMENSION:  $\Phi$ DxL (mm); RIPPLE CURRENT: A/RMS at 120Hz, 105°C)

$\mu$ F	V.D.C. CODE	16V (1C)					25V (1E)				35V (1V)															
		20	22	25	30	35	22	25	30	35	22	25	30	35												
3300	332											22 x 25	1.3													
3900	392											22 x 30	1.5													
4700	472											22 x 25	1.63	25 x 25	1.70											
5600	562											22 x 25	1.63	25 x 25	1.77	30 x 25	1.99									
6800	682											22 x 30	1.86	25 x 30	2.04	30 x 30	2.24									
8200	822							22 x 25	1.73			22 x 35	2.10	25 x 35	2.60	30 x 25	2.49	35 x 25	2.69							
10000	103	20 x 25	1.61	22 x 25	1.78			22 x 30	2.05	25 x 25	2.05			22 x 40	2.42	25 x 40	2.83	30 x 30	2.75							
12000	123			22 x 25	1.92			22 x 35	2.23	25 x 25	2.09	30 x 25	2.45	35 x 25	2.74	22 x 45	2.79	25 x 45	3.00	30 x 35	2.96	35 x 25	2.75			
15000	153			22 x 30	2.00	25 x 25	2.25					22 x 40	3	25 x 35	2.80	30 x 25	2.72	35 x 25	3.00		25 x 45	3.24	30 x 45	3.24	35 x 25	3.12
18000	183			22 x 35	2.49	25 x 30	2.52	30 x 25	2.61			22 x 45	2.9	25 x 35	2.83	30 x 30	3.07	35 x 25	3.02		25 x 50	3.71	30 x 45	4.07	35 x 35	4.02
																									35 x 40	4.37
22000	223			22 x 40	2.9	25 x 30	2.77	30 x 25	2.88			22 x 50	3.3	25 x 40	3.22	30 x 30	3.18	35 x 25	3.07				30 x 45	4.34	35 x 40	4.69
27000	273					25 x 35	3.02	30 x 30	3.15						30 x 35	3.35	35 x 30	3.46								
33000	333							30 x 30	3.48	35 x 25	3.57															
39000	393							30 x 35	4.03	35 x 30	4.16															
47000	473							35 x 35	4.85																	

$\mu$ F	V.D.C. CODE	50V (1H)					63V (1J)				80V																
		20	22	25	30	35	22	25	30	35	22	25	30	35													
1000	102													22 x 25	1.05												
1200	122											22 x 25	1.19								22 x 30	1.24					
1500	152											22 x 25	1.30	25 x 25	1.38					22 x 35	1.48	25 x 25	1.38				
1800	182			22 x 25	1.33							22 x 25	1.36	25 x 25	1.52					22 x 40	1.72	25 x 30	1.63				
2200	222			22 x 25	1.48							22 x 30	1.55	25 x 25	1.60					22 x 45	1.82	25 x 30	1.65				
2700	272			22 x 25	1.53	25 x 25	1.57					22 x 35	1.89	25 x 30	1.90	30 x 25	1.97					25 x 45	2.17	30 x 30	2.03		
3300	322			22 x 30	1.76	25 x 25	1.70					22 x 40	1.99	25 x 35	2.06	30 x 25	2.00	35 x 25	2.22			25 x 50	2.51		35 x 25	2.30	
3900	392			22 x 35	1.97	25 x 25	1.82	30 x 25	1.95			22 x 45	2.34	25 x 35	2.20	30 x 25	2.18	35 x 25	2.40					30 x 45	2.89	35 x 30	2.68
4700	472			22 x 35	2.01	25 x 30	2.18	30 x 25	2.04	35 x 25	2.48	22 x 50	2.58	25 x 40	2.51	30 x 30	2.48	35 x 25	2.54					30 x 50	2.97	35 x 30	2.64
5600	562			22 x 40	2.32	25 x 35	2.47	30 x 25	2.33					25 x 45	2.92	30 x 35	2.91	35 x 30	3.00					30 x 45	3.10	35 x 45	3.39
6800	682																									30 x 40	3.56
				22 x 45	2.70	25 x 40	2.92	30 x 30	2.84	35 x 25	2.91					30 x 50	3.65	35 x 30	3.30							35 x 50	3.90
8200	822					25 x 45	3.13	30 x 35	3.13	35 x 30	3.23					30 x 45	3.57	35 x 35	3.52								
10000	103					25 x 50	3.39	30 x 40	3.55	35 x 30	3.47							35 x 40	3.90								
12000	103							30 x 45	4.04	35 x 35	3.98							35 x 45	4.50								
15000	153							30 x 50	4.60	35 x 45	4.80																

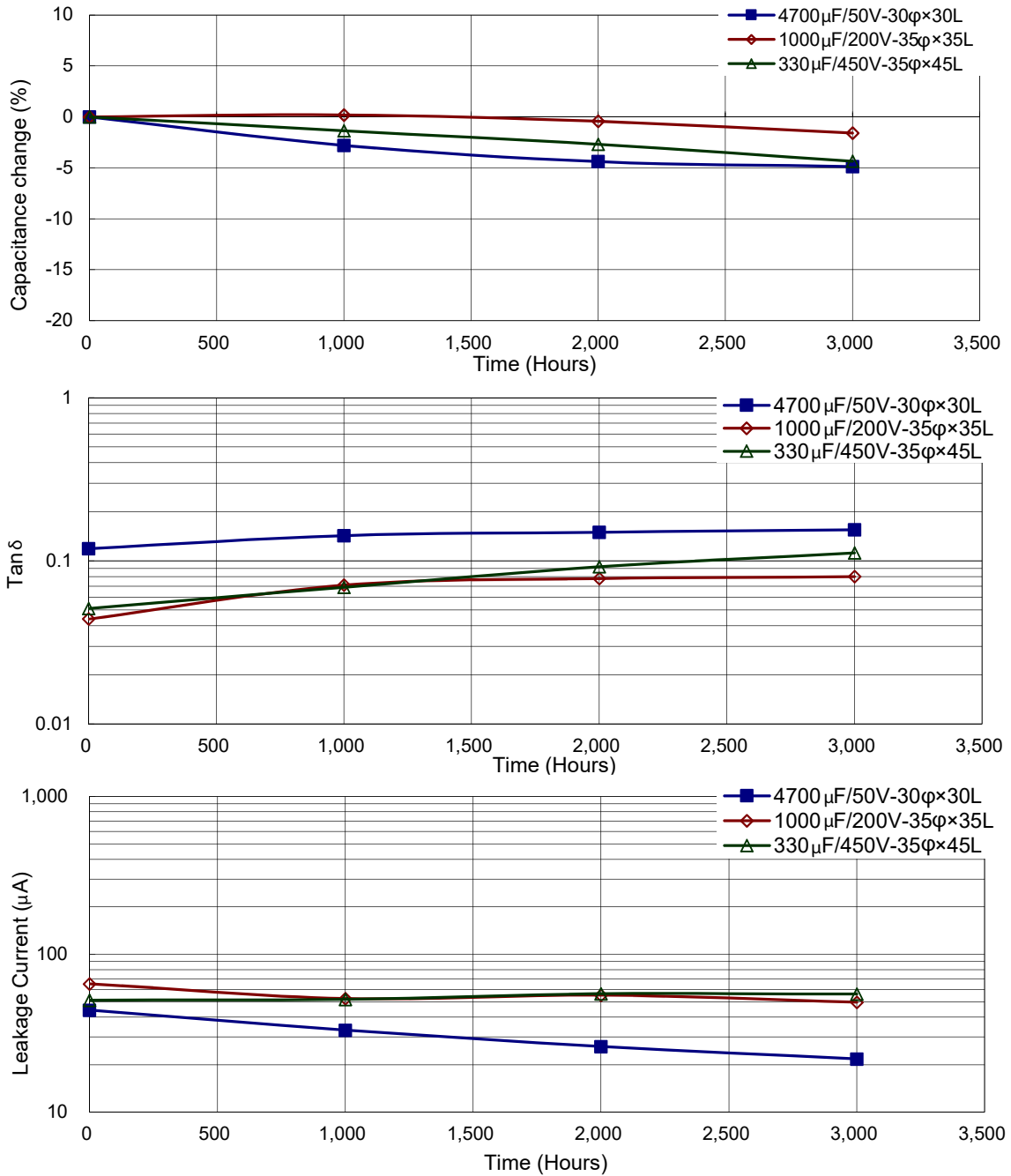


µF	V.D.C. CODE	100V					160V					200V																	
		20	22	25	30	35	22	25	30	35	22	25	30	35	40														
270	271						22 x 25	0.86				22 x 25	0.95																
330	331						22 x 25	1.10				22 x 30	1.13	25 x 25	1.13														
390	391						22 x 30	1.22	25 x 25	1.15				22 x 35	1.25	25 x 30	1.21	30 x 25	1.20										
470	471						22 x 35	1.36	25 x 25	1.33				22 x 35	1.23	25 x 30	1.32	30 x 25	1.50										
560	561						22 x 40	1.50	25 x 30	1.45	30 x 25	1.40				22 x 40	1.43	25 x 35	1.50	30 x 30	1.52	35 x 25	1.49						
680	681						22 x 45	1.65	25 x 35	1.65	30 x 25	1.65				22 x 50	1.74	25 x 40	1.70	30 x 30	1.58	35 x 25	1.72						
820	821		22 x 30	1.14			22 x 50	1.93	25 x 40	1.85	30 x 30	1.76	35 x 25	1.91			25 x 45	1.85	30 x 35	1.85	35 x 30	1.90							
1000	102		22 x 30	1.26													25 x 55	2.13	30 x 40	2.06	35 x 30	2.01							
1200	122		22 x 35	1.55	25 x 30	1.56	30 x 25	1.68																	30 x 45	2.37	35 x 35	2.34	
1500	152		22 x 40	1.78	25 x 35	1.80	30 x 25	1.76	35 x 25	1.98															30 x 50	2.77	35 x 40	2.76	
1800	182		22 x 45	1.99	25 x 35	1.95	30 x 30	2.29	35 x 25	2.34															35 x 45	3.17			
2200	222		22 x 50	2.21	25 x 40	2.15	30 x 30	2.12	35 x 25	2.27															35 x 55	3.82			
2700	272				25 x 50	2.59	30 x 35	2.37	35 x 30	2.62																		40 x 50	4.39
3300	332						30 x 40	2.77	35 x 35	2.99																			
3900	392						30 x 45	3.02	35 x 40	3.35																			
4700	472									35 x 40	3.30																		
5600	562									35 x 45	3.51																		

µF	V.D.C. CODE	250V				350V				400V														
		22	25	30	35	40	22	25	30	35	40	22	25	30	35	40	45							
100	101						22 x 25	0.58				22 x 25	0.52											
120	121						22 x 30	0.69	25 x 25	0.69				22 x 30	0.62	25 x 25	0.61							
150	151						22 x 35	0.80				22 x 35	0.70	25 x 30	0.73									
180	181	22 x 35	0.78				25 x 30	0.82	30 x 25	0.85				22 x 40	0.81	25 x 35	0.85	30 x 25	0.83					
220	221	22 x 30	0.85	25 x 25	0.90		22 x 40	0.95	25 x 40	1.04	30 x 30	1.02	35 x 25	1.04	22 x 45	0.94	25 x 40	1.00	30 x 30	0.99				
270	271	22 x 30	0.91	25 x 25	0.91	30 x 25	1.01				25 x 45	1.17	30 x 35	1.17	35 x 25	1.12	22 x 55	1.14	25 x 45	1.17	30 x 35	1.16	35 x 25	1.08
330	331	22 x 35	1.03	25 x 30	1.13	30 x 25	1.05				25 x 50	1.20	30 x 35	1.12	35 x 30	1.21			25 x 50	1.30	30 x 40	1.36		
390	391	22 x 40	1.13	25 x 35	1.27	30 x 25	1.11				30 x 40	1.29						30 x 45	1.56	35 x 30	1.44			
470	471	22 x 45	1.31	25 x 40	1.49	30 x 30	1.37	35 x 25	1.17				30 x 45	1.48	35 x 40	1.63			30 x 50	1.72	35 x 40	1.78		
560	561			25 x 45	1.79	30 x 35	1.58	35 x 25	1.61				35 x 40	1.69	40 x 30	1.63			30 x 55	1.95	35 x 40	1.86	40 x 35	1.91
680	681			25 x 50	1.77	30 x 40	2.00	35 x 30	1.95				35 x 35	1.52	40 x 35	1.58			35 x 50	2.25	40 x 40	2.22		
820	821					30 x 45	2.30	35 x 30	2.27				35 x 50	1.86	40 x 50	2.01			35 x 55	2.58	40 x 50	2.67		
1000	102					30 x 50	2.37	35 x 40	2.65				35 x 60	2.22	40 x 50	2.21			35 x 65	2.90	40 x 55	2.92		
1200	122					30 x 55	2.71	35 x 45	3.05				40 x 55	2.52					35 x 75	3	40 x 60	3		
1500	152							35 x 50	3.18				40 x 65	3.03									45 x 70	4.23
1800	182							35 x 60	3.76														45 x 80	4.92
2200	222							35 x 70	4.45															

µF	V.D.C. CODE	420V					450V					500V												
		22	25	30	35	40	22	25	30	35	40	45	22	25	30	35	40							
82	820	22 x 25	0.45				22 x 25	0.45				22 x 30	0.75	25 x 30	0.81									
100	101	22 x 30	0.53				22 x 30	0.53	25 x 25	0.51				22 x 40	0.94	25 x 40	1.00							
120	121	22 x 35	0.62	25 x 25	0.58		22 x 35	0.62				22 x 50	1.14	25 x 50	1.22									
150	151	22 x 40	0.74				22 x 40	0.74	25 x 30	0.70		35 x 25	0.83	22 x 50	1.27	25 x 55	1.42							
180	181	22 x 45	0.85	25 x 30	0.77		22 x 45	0.88	25 x 35	0.82	30 x 25	0.80			30 x 35	1.42								
220	221	22 x 50	1.00	25 x 40	0.96	30 x 30	0.95				25 x 40	0.96	30 x 30	0.95			30 x 35	1.57	35 x 40	1.74				
270	271	22 x 60	1.20	25 x 50	1.10	30 x 35	1.06	35 x 30	1.09				25 x 50	1.21	30 x 35	1.12			35 x 45	2.02				
330	331			25 x 55	1.36	30 x 40	1.24	35 x 30	1.21				25 x 55	1.35	30 x 40	1.31	35 x 30	1.27			35 x 50	2.45		
390	391					30 x 45	1.42	35 x 35	1.40	40 x 40	1.60				30 x 45	1.49	35 x 35	1.47	40 x 30	1.51				
470	471							35 x 40	1.62	40 x 35	1.66				30 x 55	1.79	35 x 40	1.71	40 x 35	1.75			35 x 60	2.62
560	561							35 x 45	1.77	40 x 40	1.82				35 x 45	1.96	40 x 40	2.02						
680	681							35 x 50	2.12	40 x 45	2.11				35 x 55	2.35	40 x 45	2.33			35 x 70	3.38		
820	821							35 x 60	2.42	40 x 55	2.52				40 x 50	2.68					40 x 70	4.00		
1000	102							35 x 70	3.08	40 x 60	2.88				40 x 60	3.03					40 x 80	4.68		
1200	122							35 x 90	3.51	40 x 70	3.38				35 x 90	3.68	40 x 70	3.54						
1500	152													45 x 80	4.49									

**TYPICAL ENDURANCE CURVES**



**USEFUL LIFE CHART**

