



SSG Series

Features

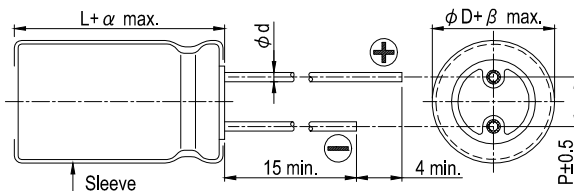
- 105°C, 1,000 hours assured
- Standard micro miniature size with 5mm height
- RoHS compliant



Specifications

Items	Performance																																	
Category Temperature Range	-40℃ ~ +105℃																																	
Capacitance Tolerance	± 20% (at 120 Hz, 20℃)																																	
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																																	
Tanδ (at 120 Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Tanδ (max.)</td><td>0.35</td><td>0.25</td><td>0.20</td><td>0.17</td><td>0.15</td><td>0.13</td><td>0.10</td></tr></table>								Rated Voltage	4	6.3	10	16	25	35	50	Tanδ (max.)	0.35	0.25	0.20	0.17	0.15	0.13	0.10										
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Low Temperature Characteristics (at 120 Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td rowspan="2">Impedance Ratio</td><td>Z(-25℃) / Z(+20℃)</td><td>7</td><td>6</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃) / Z(+20℃)</td><td>15</td><td>12</td><td>8</td><td>6</td><td>4</td><td>4</td><td>4</td></tr></table>								Rated Voltage		4	6.3	10	16	25	35	50	Impedance Ratio	Z(-25℃) / Z(+20℃)	7	6	4	3	2	2	2	Z(-40℃) / Z(+20℃)	15	12	8	6	4	4	4
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Endurance	<table><tr><td>Test Time</td><td>1,000 Hrs</td></tr><tr><td>Capacitance Change</td><td>Within ± 30% of initial value for 4 ~ 6.3V; Within ± 25% of initial value for 10 ~ 50V</td></tr><tr><td>Tanδ</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 1,000 hours at 105℃.								Test Time	1,000 Hrs	Capacitance Change	Within ± 30% of initial value for 4 ~ 6.3V; Within ± 25% of initial value for 10 ~ 50V	Tanδ	Less than 200% of specified value	Leakage Current	Within specified value																		
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Shelf Life Test	Test time: 500 hours; other items are the same as those for the Endurance.																																	
Ripple Current and Frequency Multipliers	<table><tr><td> Freq.(Hz) Cap.(μF) </td><td>60 (50)</td><td>120</td><td>500</td><td>1k</td><td>10k up</td></tr><tr><td>≤ 47</td><td>0.75</td><td>1.00</td><td>1.15</td><td>1.34</td><td>1.50</td></tr><tr><td>100 ~ 220</td><td>0.80</td><td>1.00</td><td>1.08</td><td>1.20</td><td>1.30</td></tr></table>								Freq.(Hz) Cap.(μF)	60 (50)	120	500	1k	10k up	≤ 47	0.75	1.00	1.15	1.34	1.50	100 ~ 220	0.80	1.00	1.08	1.20	1.30								
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Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

φD	4	5	6.3
P	1.5	2.0	2.5
φd	0.45		
α	1.0		
β	0.5		

Dimension: φD × L(mm)

Ripple Current: mA/rms at 120 Hz, 105°C

Dimension and Permissible Ripple Current

Rated Volt. (V _{DC}) Cap. (μF)	Contents	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
		φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA
1	010													4×5	7
2.2	2R2											4×5	8.7	4×5	10
3.3	3R3									4×5	11	4×5	12	4×5	13
4.7	4R7							4×5	14	4×5	15	4×5	17	5×5	20
10	100					4×5	14	4×5	23	5×5	27	5×5	27	6.3×5	31
22	220			4×5	21	5×5	27	5×5	30	6.3×5	42	6.3×5	46	6.3×5	46
33	330	4×5	27	5×5	30	5×5	34	6.3×5	40	6.3×5	52	6.3×5	52		
47	470	4×5	34	5×5	36	6.3×5	43	6.3×5	48	6.3×5	58				
100	101	5×5	50	6.3×5	56	6.3×5	70								
220	221	6.3×5	74												

Part Numbering System

SSG Series	100μF	± 20%	6.3V	Bulk Package	Gas Type	6.3 φ × 5L	General Purpose
SSG	101	M	0J	BK	-	0605	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Application

Note: For more details, please refer to "Part Numbering System - Radial Type" on page 139.