



SS Series

Features

- 85°C, 1,000 hours assured
- Standard micro miniature size with 5mm height
- RoHS Compliance



Sleeve & Marking Color: Black & White

Specifications

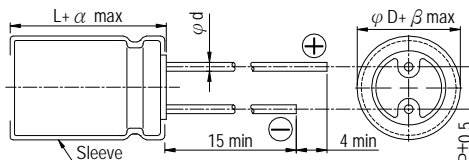
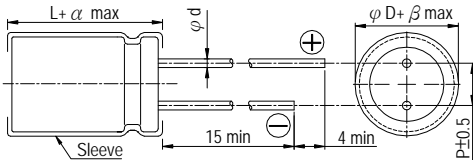
Items	Performance																										
Category Temperature Range	-40°C ~ +85°C																										
Capacitance Tolerance	±20% (at 120Hz, 20°C)																										
Leakage Current (at 20°C)	$I = 0.01CV$ or $3 (\mu A)$ whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V																										
Tan δ (at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <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> </tbody> </table>	Rated Voltage	4	6.3	10	16	25	35	50	Tan δ (max)	0.35	0.25	0.20	0.17	0.15	0.13	0.10										
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Low Temperature Characteristics (at 120Hz)	<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>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</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°C)/Z(+20°C)</td> <td>15</td> <td>12</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	Rated Voltage		4	6.3	10	16	25	35	50	Impedance Ratio	Z(-25°C)/Z(+20°C)	7	6	4	3	2	2	2	Z(-40°C)/Z(+20°C)	15	12	8	6	4	4	4
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Shelf Life Test	Test time: 500 hours; other items are the same as those for the Endurance.																										
Ripple Current & Frequency Multipliers	<table border="1"> <thead> <tr> <th rowspan="2">Cap.(μF)</th> <th colspan="6">Freq.(Hz)</th> </tr> <tr> <th>60 (50)</th> <th>120</th> <th>500</th> <th>1k</th> <th>10k up</th> </tr> </thead> <tbody> <tr> <td>Under 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 to 330</td> <td>0.80</td> <td>1.00</td> <td>1.08</td> <td>1.20</td> <td>1.30</td> </tr> </tbody> </table>	Cap.(μF)	Freq.(Hz)						60 (50)	120	500	1k	10k up	Under 47	0.75	1.00	1.15	1.34	1.50	100 to 330	0.80	1.00	1.08	1.20	1.30		
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Diagram of Dimensions

1. $\phi D = 3mm$

2. $\phi D \geq 4mm$

Unit: mm



Lead Spacing and Diameter

ϕD	3	4	5	6.3	8
P	1.0	1.5	2.0	2.5	2.5
ϕd	0.45				
α	1.0				
β	0.5				

Dimension & Permissible Ripple Current

Ripple Current: mA/rms at 120 Hz, 85°C

μF	V. DC Contents	4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
		$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1	0R1													3x5	1
0.22	R22													3x5	2
0.33	R33													3x5	2.8
0.47	R47													3x5	4
1	010													4x5(3x5)	8.7(7)
2.2	2R2											4x5(3x5)	8.7(7)	4x5(3x5)	10(9)
3.3	3R3									4x5(3x5)	11(10)	4x5	12	4x5	13
4.7	4R7							4x5(3x5)	14(11)	4x5	14	4x5	17	5x5	20
10	100					4x5(3x5)	17(13)	4x5	23	5x5	27	5x5	27	6.3x5	31
22	220			4x5(3x5)	22(18)	5x5	30	5x5	35	6.3x5	42	6.3x5	46	6.3x5	46
33	330	4x5	27	4x5	34	5x5	41	5x5	49	6.3x5	52	6.3x5	52	8x5	66
47	470	4x5	34	5x5	37	6.3x5	50	6.3x5	58	6.3x5	58	8x5	72	8x5	80
100	101	5x5	55	6.3x5	62	6.3x5	70	8x5	99	8x5	99				
220	221	6.3x5	74	8x5	104	8x5	120								
330	331	8x5	105	8x5	120										

Part Numbering System

SS series	330 μF	±20%	6.3V	Bulk Package	Gas Type	8 ϕ x5L	Pb-free and PET coating case
SS-	331	M	0J	BK	-	0805	
Series	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration & Package	Rubber Type	Case Size	Lead Wire and Coating Type

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 10.