

## SD Series 7 mm, Low Leakage Current 105°C



### Features

- ◆ 105°C Low leakage current, height 7 mm
- ◆ RoHS Compliant

### Specifications

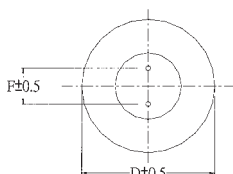
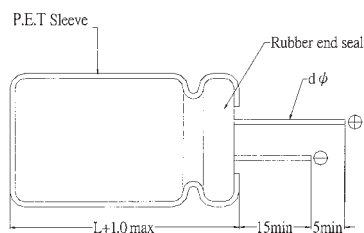
Item	Performance Characteristics																											
Operating Temperature Range	-40 to +105°C																											
Rated Voltage Range	4 to 63 VDC																											
Capacitance Range	0.1 to 100 μF																											
Capacitance Tolerance	±20% (120Hz, +20°C)																											
Leakage Current(+20°C, max)	$I \leq 0.002 CV$ or $0.4 (\mu A)$ After 2 minute, whichever is greater measured with rated working voltage applied.																											
Dissipation Factor ( $\tan \delta$ , at 20°C , 120Hz)	<table border="1"> <tr> <th>Rated Voltage(VDC)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> <tr> <th>D.F. (%)max.</th> <td>25</td> <td>22</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> </tr> </table>	Rated Voltage(VDC)	4	6.3	10	16	25	35	50	63	D.F. (%)max.	25	22	20	16	14	12	10	10									
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Low Temperature Characteristics (at 120Hz)	Impedance ratio max																											
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Z-40°C/Z+20°C	12	10	6	6	4	4	4	3																				
Endurance	Test conditions																											
	Duration time	:1000 Hrs																										
	Ambient temperature	:+105°C																										
	Applied voltage	:Rated DC working voltage																										
	After test requirement at +20°C																											
	Capacitance change	: $\leq \pm 20\%$ of the initial measured value (4V : $\leq \pm 30\%$ )																										
Shelf Life	Dissipation factor	: $\leq 200\%$ of the initial specified value																										
	Leakage current	: $\leq$ The initial specified value																										
	Test conditions																											
Shelf Life	Duration time	:1000 Hrs																										
	Ambient temperature	:+105°C																										
	Applied voltage	:None																										
After test requirement at +20°C : Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																												

Radial

### Multiplier for Ripple Current vs. Frequency

Frequency(Hz) \ CAP( μ F)	50(60)	120	400	1K	$\geq 10K$
0.1~10	0.65	1.00	1.20	1.30	1.5
10~100	0.80	1.00	1.10	1.15	1.2

### Diagram of Dimensions:(unit:mm)



D φ	4	5	6.3	8
F	$1.5 \pm 0.5$	$2.0 \pm 0.5$	$2.5 \pm 0.5$	$3.5 \pm 0.5$
d φ	0.45		0.5	

## Case Size

WV (Vdc)	Cap (µF)	Size (mm)	Rated Ripple current (mA <sub>rms</sub> /105°C /120Hz)
4	33	4x7	33
4	47	4x7	39
4	100	6.3x7	59
6.3	33	4x7	41
6.3	47	5x7	49
6.3	100	6.3x7	75
10	22	4x7	36
10	33	5x7	44
10	47	6.3x7	54
10	100	8x7	90
16	10	4x7	27
16	22	4x7	40
16	33	5x7	50
16	47	6.3x7	62
25	4.7	4x7	19
25	10	5x7	29
25	22	6.3x7	44
25	33	6.3x7	55
25	47	8x7	74
35	3.3	4x7	18
35	4.7	5x7	21

WV (Vdc)	Cap (µF)	Size (mm)	Rated Ripple current (mA <sub>rms</sub> /105°C /120Hz)
35	10	5x7	32
35	22	6.3x7	49
35	33	8x7	67
50	0.1	4x7	3
50	0.22	4x7	5
50	0.33	4x7	6
50	0.47	4x7	7
50	1	4x7	10
50	2.2	4x7	16
50	3.3	4x7	20
50	4.7	6.3x7	24
50	10	8x7	40
63	0.1	4x7	3
63	0.22	4x7	5
63	0.33	4x7	6
63	0.47	4x7	7
63	1	4x7	10
63	2.2	5x7	19
63	3.3	6.3x7	29
63	4.7	6.3x7	36