

## SA Series 5 mm, Low Leakage Current 85°C



### Features

- ◆ Low leakage current, height 5 mm
- ◆ RoHS Compliant

### Specifications

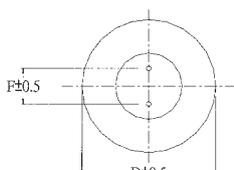
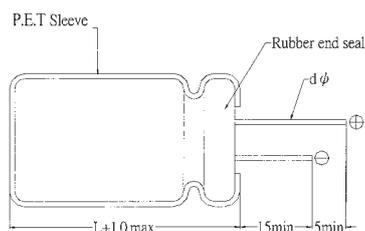
Item	Performance Characteristics																
Operating Temperature Range	-40 to +85°C																
Rated Voltage Range	4 to 50 VDC																
Capacitance Range	0.1 to 100 μF																
Capacitance Tolerance	±20% (120Hz, +20°C)																
Leakage Current(+20°C, max)	I ≤ 0.002 CV or 0.4 (μA) After 2 minute, whichever is greater measured with rated working voltage applied.																
Dissipation Factor (tan δ , at 20°C , 120Hz)	<table border="1"> <tr> <td>Rated Voltage(VDC)</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>D.F. (%)max.</td> <td>35</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> </tr> </table>	Rated Voltage(VDC)	4	6.3	10	16	25	35	50	D.F. (%)max.	35	24	20	16	14	12	10
	Rated Voltage(VDC)	4	6.3	10	16	25	35	50									
D.F. (%)max.	35	24	20	16	14	12	10										
Low Temperature Characteristics (at 120Hz)	Impedance ratio max <table border="1"> <tr> <td>Rated Voltage(VDC)</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>Z-40°C / Z+20°C</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>	Rated Voltage(VDC)	4	6.3	10	16	25	35	50	Z-40°C / Z+20°C	15	10	8	6	4	3	3
Rated Voltage(VDC)	4	6.3	10	16	25	35	50										
Z-40°C / Z+20°C	15	10	8	6	4	3	3										
Endurance	Test conditions Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change :≤ ±20% of the initial measured value (4V : ≤ ±30%) Dissipation factor :≤ 200% of the initial specified value Leakage current :≤ The initial specified value																
Shelf Life	Test conditions Duration time :1000 Hrs Ambient temperature :+85°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	1K	≥10K
0.1~47 μ F	0.8	1	1.30	1.5
100 μ F	0.8	1	1.15	1.2

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



D φ	4	5	6.3	8
F	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
d φ	0.45			

## Case Size

WV (Vdc)	Cap (uF)	Size (mm)	Rated Ripple current (mA rms/85°C /120Hz)
4	33	5x5	28
4	47	5x5	33
4	100	6.3x5	56
6.3	22	4x5	28
6.3	33	5x5	37
6.3	47	5x5	45
6.3	100	6.3x5	70
10	22	4x5	32
10	33	5x5	41
10	47	6.3x5	52
16	10	4x5	25
16	22	5x5	37
16	33	6.3x5	49
16	47	6.3x5	58
25	4.7	4x5	16
25	10	5x5	27
25	22	6.3x5	42
25	33	6.3x5	52
35	4.7	4x5	18
35	10	5x5	29
35	22	6.3x5	46
50	0.1	4x5	1
50	0.22	4x5	2
50	0.33	4x5	3
50	0.47	4x5	4
50	1	4x5	8
50	2.2	4x5	13
50	3.3	5x5	17
50	4.7	5x5	20
50	10	6.3x5	33
50	22	8x5	60