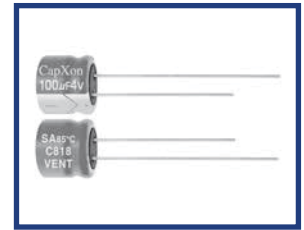


## SA Series 5 mm, Low Leakage Current 85°C

### Features

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



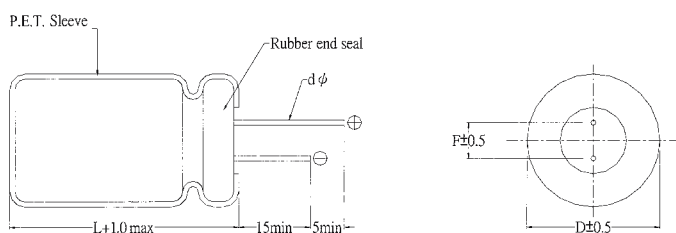
### Specifications

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 minutes, whichever is greater measured with rated working voltage applied.																
Dissipation Factor (tan δ · at 20°C · 120Hz)	<table border="1"> <thead> <tr> <th>Working 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> </tr> </thead> <tbody> <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> </tbody> </table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	D.F. (%)max	35	24	20	16	14	12	10
Working 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"> <thead> <tr> <th>Working 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> </tr> </thead> <tbody> <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> </tbody> </table>	Working Voltage (VDC)	4	6.3	10	16	25	35	50	Z-40°C / Z+20°C	15	10	8	6	4	3	3
Working 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.																

### Multiplier for Ripple Current vs. Frequency

CAP(µ F)\Frequency(Hz)	50(60)	120	1K	≥10K
0.1~47	0.8	1	1.30	1.50
100	0.8	1	1.15	1.20

### 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 Cap(μF)		φ DxL(mm)													
		4		6.3		10		16		25		35		50	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1														4x5	1.0
0.22														4x5	2.0
0.33														4x5	2.8
0.47														4x5	4.0
1														4x5	8.4
2.2														4x5	13
3.3														5x5	17
4.7									4x5	16	4x5	18		5x5	20
10								4x5	25	5x5	27	5x5	29	6.3x5	33
22			4x5	28	4x5	32	5x5	37	6.3x5	42	6.3x5	46		8x5	60
33		5x5	28	5x5	37	5x5	41	6.3x5	49	6.3x5	52				
47		5x5	33	5x5	45	6.3x5	52	6.3x5	58						
100		6.3x5	56	6.3x5	70										

Ripple Current ( mA, rms ) at 85°C 120Hz