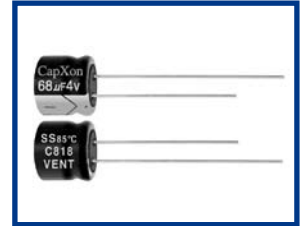


SS Series 5 mm 85°C

Features

- ◆ Design for space-saving and high density insertion.
- ◆ 4WV products are standardized for recent battery power source devices.
- ◆ Low price compared to Tantalum capacitors.
- ◆ Applications: VTR, car radio and commercial applications.
- ◆ For detail specifications, please refer to Engineering Bulletin No. E108
- ◆ RoHS Compliant



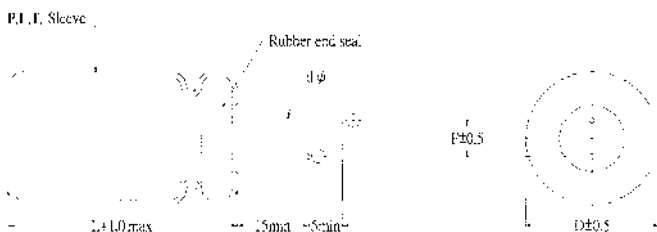
Specifications

Item	Performance Characteristics																								
Operating Temperature Range	-40 to +85°C																								
Rated Voltage Range	4 to 50 VDC																								
Capacitance Range	0.1 to 330 µF																								
Capacitance Tolerance	±20% (120Hz, +20°C)																								
Leakage Current(+20°C, max)	I ≤ 0.01 CV or 3 (µA) After 1 minute, whichever is greater measured with rated working voltage applied.																								
Dissipation Factor (tan δ, at 20°C, 120Hz)	<table border="1"> <tr> <td>Working 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>	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"> <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-25°C/Z+20°C</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>15</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage(VDC)	4	6.3	10	16	25	35	50	Z-25°C/Z+20°C	7	4	3	2	2	2	2	Z-40°C/Z+20°C	15	8	8	4	4	3	3
Rated voltage(VDC)	4	6.3	10	16	25	35	50																		
Z-25°C/Z+20°C	7	4	3	2	2	2	2																		
Z-40°C/Z+20°C	15	8	8	4	4	3	3																		
Load Life	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 Load life. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																								

Multiplier for Ripple Current vs. Frequency

CAP(µF)\Frequency(Hz)	60(50)	120	1K	≥10K
0.1~68 µF	0.8	1	1.30	1.50
100~330 µF	0.8	1	1.15	1.20

Diagram of Dimensions:(unit:mm)



D φ	3	4	5	6.3	8
F	1.0±0.3	1.5±0.5	2.0±0.5	2.5±0.5	3.5±0.5
d φ	0.4	0.45			0.50

Case Size

φ DxL(mm)

WV (SV) Cap(μF)	4 (5)		6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)		
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	
0.1													3x5	1.0	
													4x5	1.5	
0.15													3x5	1.8	
													4x5	2.0	
0.22													3x5	2.3	
													4x5	2.6	
0.33													3x5	3.0	
													4x5	3.2	
0.47													3x5	3.5	
													4x5	3.8	
0.68													3x5	4.6	
													4x5	5.0	
1													3x5	5.6	
													4x5	6.2	
1.5													3x5	6.5	
													4x5	7.0	
2.2												3x5	8.4	3x5	8.6
												4x5	8.4	4x5	9.0
3.3										3x5	9.2	3x5	10	4x5	14
										4x5	10	4x5	11		
4.7								3x5	10	3x5	12	4x5	18	5x5	20
								4x5	11	4x5	15				
6.8						3x5	9	3x5	11	4x5	17	5x5	20	6.3x5	25
						4x5	11	4x5	13						
10	3x5	9	3x5	13	3x5	15	3x5	18	4x5	27	5x5	29	6.3x5	30	
	4x5	11	4x5	14	4x5	17	4x5	20	5x5	28					
15	4x5	17	4x5	17	4x5	21	5x5	26	5x5	30	6.3x5	33	6.3x5	37	
										6.3x5	33				
22	3x5	19	3x5	21	4x5	30	4x5	33	6.3x5	44	6.3x5	46	6.3x5	48	
	4x5	21	4x5	24	5x5	33	5x5	35					8x5	52	
33	3x5	26	4x5	33	5x5	39	5x5	42	6.3x5	52	8x5	63	8x5	70	
	4x5	28	5x5	37				6.3x5	46						
47	4x5	33	5x5	39	5x5	42	6.3x5	58	6.3x5	62	8x5	83			
					6.3x5	46									
68	5x5	43	6.3x5	53	6.3x5	56	6.3x5	65	8x5	90					
	6.3x5	48													
100	5x5	52	6.3x5	65	6.3x5	76	6.3x5	86	8x5	108					
								8x5	92						
220	6.3x5	78	6.3x5	90	8x5	138									
			8x5	115											
330	8x5	142	8x5	145											

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