

# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS



## SC Chip type, High CV Series



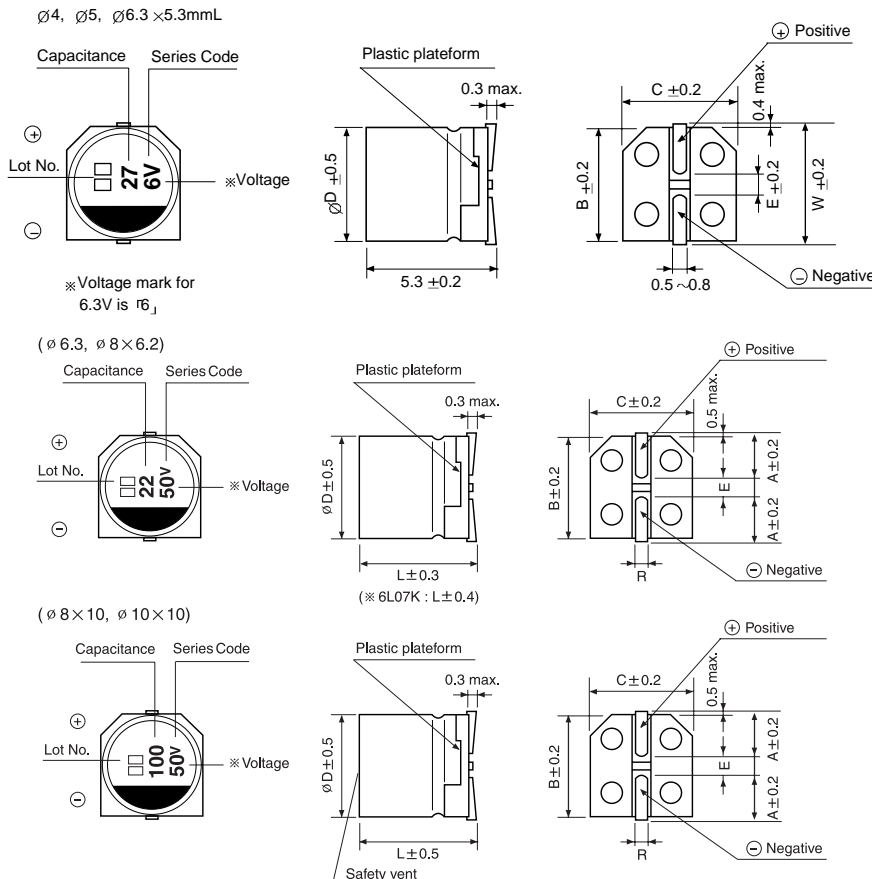
- Chip type higher capacitance in larger case sizes
- Designed for surface mounting on high density PC board
- Applicable to automatic mounting machine using carrier tape



Item	Characteristics																								
Operating temperature range	-40 ~ +85 °C																								
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 minutes) I = 0.03CV (after 1 minutes)																								
Capacitance tolerance	±20% at 120Hz, 20°C																								
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>WV</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> <th>100</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.35 (0.40)</td> <td>0.28 (0.35)</td> <td>0.20 (0.24)</td> <td>0.16 (0.20)</td> <td>0.13 (0.16)</td> <td>0.12 (0.15)</td> <td>0.09 (0.12)</td> <td>0.12</td> <td>0.12</td> </tr> </tbody> </table>	WV	4	6.3	10	16	25	35	50	63	100	tan δ	0.35 (0.40)	0.28 (0.35)	0.20 (0.24)	0.16 (0.20)	0.13 (0.16)	0.12 (0.15)	0.09 (0.12)	0.12	0.12				
	WV	4	6.3	10	16	25	35	50	63	100															
tan δ	0.35 (0.40)	0.28 (0.35)	0.20 (0.24)	0.16 (0.20)	0.13 (0.16)	0.12 (0.15)	0.09 (0.12)	0.12	0.12																
Figures in ( ) are for small size, over the 6.3 × 5.8 (∅D × L)																									
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50 ~ 100</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>6</td> <td>5</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>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	WV	4	6.3	10	16	25	35	50 ~ 100	Z-25°C/Z+20°C	6	5	4	3	2	2	2	Z-40°C/Z+20°C	12	10	8	6	4	3	3
	WV	4	6.3	10	16	25	35	50 ~ 100																	
	Z-25°C/Z+20°C	6	5	4	3	2	2	2																	
Z-40°C/Z+20°C	12	10	8	6	4	3	3																		
Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current	Less than specified value																							
	Capacitance change	Within ±20% of initial value (Small size : ±25%)																							
	tan δ	Less than 200% of specified value																							
Shelf life(at 85 °C)	After 1000 hours no load test, leakage current, capacitance and tan δ are same as load life value.																								
Resistance to soldering heat	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 30 seconds.																								
	Leakage current	Less than specified value																							
	Capacitance change	Within ±10% of initial value																							
	tan δ	Less than specified value																							

## DRAWING

Unit : mm



∅D × L	W	A	B	C	E	R
4 × 5.3	4.8		4.3	4.3	1.0	0.5~0.8
5 × 5.3	6.0		5.3	5.3	1.4	0.5~0.8
6.3 × 5.3	7.1		6.6	6.6	2.2	0.5~0.8
6.3 × 5.8		2.4	6.6	6.6	2.2	0.5~0.8
6.3 × 7.7		2.4	6.6	6.6	2.2	0.5~0.8
8 × 6.2		3.3	8.3	8.3	2.3	0.5~0.8
8 × 10		2.9	8.3	8.3	3.1	0.8~1.1
10 × 10		3.2	10.3	10.3	4.5	0.8~1.1

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## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV /F	4		6.3		10		16		25		35		50		63		100	
	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current
0.1													3×5.3	2.4				
													4×5.3	3.2				
0.22													3×5.3	3.5				
													4×5.3	4.7				
0.33													3×5.3	4.3				
													4×5.3	5.7				
0.47													3×5.3	5.2				
													4×5.3	6.8				
1.0													3×5.3	7.5				
													4×5.3	10				
2.2												3×5.3	10					
												4×5.3	11	4×5.3	14.8			
3.3									3×5.3	12							6.3×5.8	29
									4×5.3	15	4×5.3	16	4×5.3	18.1				
4.7							3×5.3	13			4×5.3	19	4×5.3	24			6.3×5.8	35
							4×5.3	16	4×5.3	18			5×5.3	25	6.3×5.8	31	8×6.2	40
10	3×5.3	13	3×5.3	16					4×5.3	24	4×5.3	27	5×5.3	41				
	4×5.3	16	4×5.3	19	4×5.3	21	4×5.3	21	5×5.3	30	5×5.3	32	6.3×5.3	42.6	8×6.2	46	8×10	77
22	3×5.3	19			4×5.3	28	4×5.3	30	5×5.3	41	6.3×5.3	55	6.3×5.3	71				
	4×5.3	24	4×5.3	29	5×5.3	36	5×5.3	41	6.3×5.3	53			6.3×5.8	73	8×10	96	8×10	100
33	4×5.3	29	4×5.3	30	4×5.3	34	5×5.3	43	5×5.3	50	6.3×5.3	65	6.3×5.8	94				
			5×5.3	41	5×5.3	44	6.3×5.3	58	6.3×5.3	64	6.3×5.8	67	8×6.2	95	8×10	117	10×10	130
47	4×5.3	35	4×5.3	36	5×5.3	47	5×5.3	52	6.3×5.3	70	6.3×7.7	94	6.3×7.7	105				
			5×5.3	48	6.3×5.3	62	6.3×5.3	69	6.3×5.8	72	8×6.2	105	8×10	140	8×10	140	10×10	155
100	5×5.3	54	5×5.3	60	6.3×5.3	80	6.3×5.3	88			6.3×7.7	132	8×10	181				
	6.3×5.3	68	6.3×5.3	82	6.3×5.8	82	6.3×5.8	91	8×6.2	145	8×10	175	10×10	195	10×10	232		
220	6.3×5.3	93	6.3×5.8	91	6.3×7.7	173	6.3×7.7	162	8×10	232	10×10	265						
					8×6.2	175	8×10	215	10×10	250								
330			6.3×7.7	188					10×10	305								
			8×6.2	190	8×10	240	8×10	270										
470			8×10	265	8×10	290	8×10	307										
							10×10	330										
1000			8×10	372	10×10	454												
			10×10	400														

Ripple current (mA rms) at 85°C, 120Hz  
Case size  $\varnothing D \times L$  (mm)