

JC Chip type, Higher Capacitance Range Series

- Chip type higher capacitance in large case sizes
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive

S
Solvent Proof
WV \geq 100V

RC \rightarrow **JC**
Long life



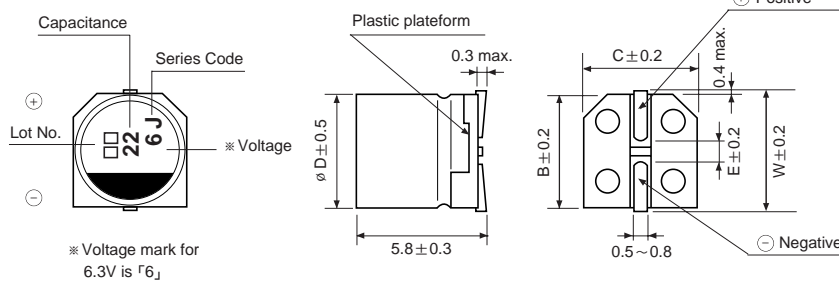
CHIP TYPES

Item	Characteristics																														
Operating temperature range	WV \leq 100 : -55 ~ +105°C WV \geq 160 : -40 ~ +105°C																														
Leakage current max.	WV \leq 100 I = 0.01CV or 3 μ A whichever is greater (after 2 minutes) WV \geq 160 I = 0.04CV + 100 μ A(after 1 minutes)																														
Capacitance tolerance	\pm 20% at 120Hz, 20°C																														
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <tr> <td>WV</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> </tr> <tr> <td>tanδ</td> <td>0.37</td> <td>0.22 (0.28)</td> <td>0.19 (0.24)</td> <td>0.16 (0.20)</td> <td>0.14 (0.16)</td> <td>0.12 (0.13)</td> <td>0.10 (0.12)</td> <td>0.10</td> <td>0.10</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table> <p>Figures in () are for small size, over the 6.3 \times 5.8 (ϕ D \times L)</p>	WV	4	6.3	10	16	25	35	50	63	100	160	200	250	400	450	tan δ	0.37	0.22 (0.28)	0.19 (0.24)	0.16 (0.20)	0.14 (0.16)	0.12 (0.13)	0.10 (0.12)	0.10	0.10	0.15	0.15	0.15	0.20	0.20
WV	4	6.3	10	16	25	35	50	63	100	160	200	250	400	450																	
tan δ	0.37	0.22 (0.28)	0.19 (0.24)	0.16 (0.20)	0.14 (0.16)	0.12 (0.13)	0.10 (0.12)	0.10	0.10	0.15	0.15	0.15	0.20	0.20																	
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>WV</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25 ~ 50</td> <td>63 ~ 100</td> <td>160 ~ 250</td> <td>400 ~ 450</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>6</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>6</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>4</td> <td>6</td> <td>10</td> </tr> </table>	WV	4	6.3	10	16	25 ~ 50	63 ~ 100	160 ~ 250	400 ~ 450	Z-25°C/Z+20°C	6	3	3	2	2	3	3	6	Z-40°C/Z+20°C	12	8	5	4	3	4	6	10			
WV	4	6.3	10	16	25 ~ 50	63 ~ 100	160 ~ 250	400 ~ 450																							
Z-25°C/Z+20°C	6	3	3	2	2	3	3	6																							
Z-40°C/Z+20°C	12	8	5	4	3	4	6	10																							
Load life (after application of the rated voltage for 2000 hours at 105°C)	<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within \pm20% of initial value (Small size : \pm25%)</td> </tr> <tr> <td>tanδ</td> <td>Less than 200% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within \pm 20% of initial value (Small size : \pm 25%)	tan δ	Less than 200% of specified value																								
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Shelf life (at 105°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. <table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within \pm10% of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within \pm 10% of initial value	tan δ	Less than specified value																								
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DRAWING

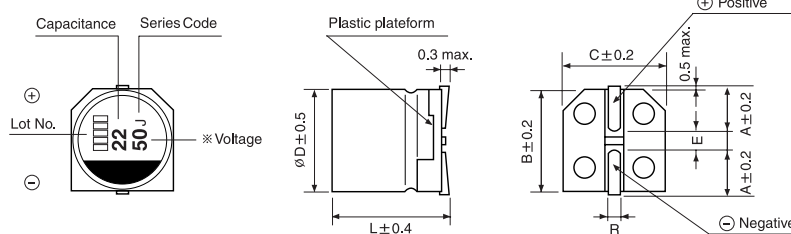
Unit : mm

(ϕ 4, ϕ 5, ϕ 6.3 \times 5.8mmL)

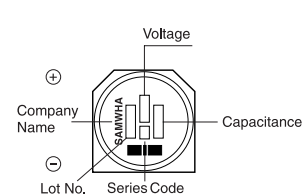


ϕ D	W	A	B	C	E	R
6.3 \times 5.8	7.1		6.6	6.6	2.2	0.5~0.8
8 \times 6.2		3.3	8.3	8.3	2.3	0.5~0.8
8 \times 10		2.9	8.3	8.3	3.1	0.8~1.1
10 \times 10		3.2	10.3	10.3	4.5	0.8~1.1
12.5 \times 13.5		4.6	12.8	12.8	4.5	1.1~1.4

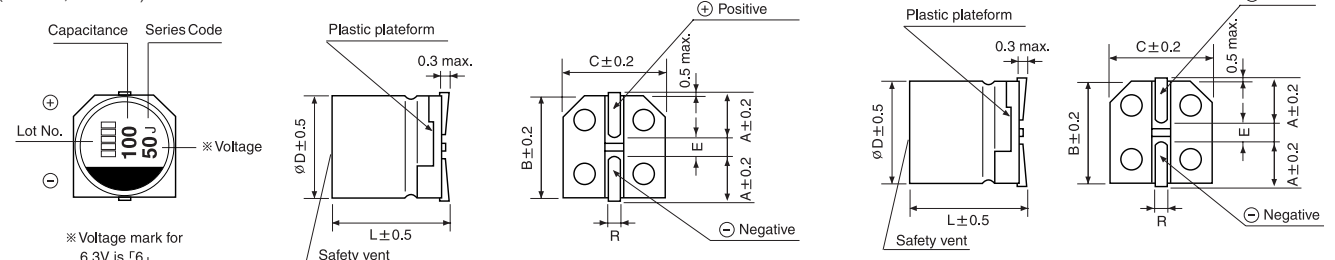
(ϕ 8 \times 6.2)



(ϕ 12.5 \times 13.5mmL)



(ϕ 8 \times 10, ϕ 10 \times 10)



SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

JC series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown WV	4		6.3		10		16		25		35		50	
10													6.3×5.8	30
22									6.3×5.8	38	6.3×5.8	42	8×6.2	67
33							6.3×5.8	40	6.3×5.8	48	8×6.2	76	8×10	133
47					6.3×5.8	46	6.3×5.8	50	8×6.2	79	8×10	124	10×10	180
100	6.3×5.8	60	6.3×5.8	60	6.3×5.8	60	8×10	148	8×10	181	10×10	304	10×10	310
220			8×10	161	8×10	173	10×10	330	10×10	351	10×10	450	12.5×13.5	480
330			8×10	288	10×10	318	10×10	441	10×10	372	12.5×13.5	500		
470			10×10	340	10×10	351	10×10	489	10×10	450	12.5×13.5	600		
680			10×10	408	10×10	392	12.5×13.5	500	12.5×13.5	500				
1000			10×10	495	10×10	550	12.5×13.5	600						
1500			10×10	560	12.5×13.5	650								
2200			12.5×13.5	730										

μF \diagdown WV	63		100		160		200		250		400		450	
3.3									10×10	30	12.5×13.5	30	12.5×13.5	40
4.7							10×10	45	12.5×13.5	65				
10	8×6.2	32			10×10	45	12.5×13.5	75						
22	8×10	60	8×10	90	12.5×13.5	85	12.5×13.5	85	← Ripple current (mA rms) at 105°C, 120Hz					
33	8×10	110	10×10	120	12.5×13.5	95	↑ Case size $\varnothing D \times L$ (mm)							
47	10×10	130												