

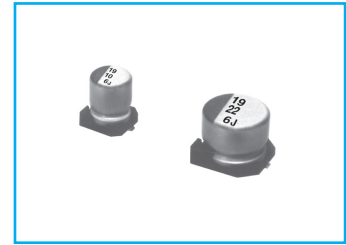
SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

JC Chip type, Higher Capacitance Range Series

S
Solvent Proof
WV ≤ 100V

- 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

RC → **JC**
Long life

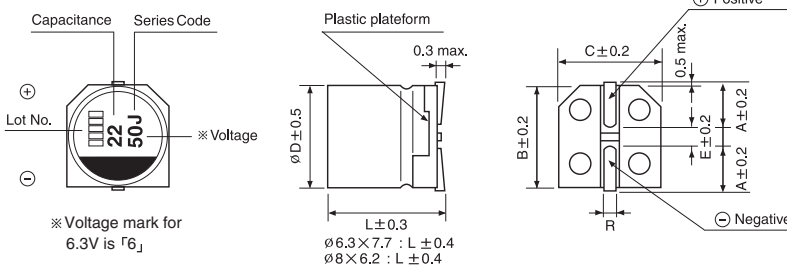


Item	Characteristics																																				
Operating temperature range	WV ≤ 100 : -55 ~ +105°C WV ≥ 160 : -40 ~ +105°C																																				
Leakage current max.	WV ≤ 100 I = 0.01CV or 3μA whichever is greater (after 2 minutes) WV ≥ 160 I = 0.04CV + 100μA(after 1 minutes)																																				
Capacitance tolerance	±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>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13</td> <td>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>	WV	4	6.3	10	16	25	35	50	63	100	160	200	250	400	450	tanδ	0.37	0.28	0.24	0.20	0.16	0.13	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																							
tanδ	0.37	0.28	0.24	0.20	0.16	0.13	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> <tr> <td>Z-55°C/Z+20°C</td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>4</td> <td>-</td> <td>-</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	Z-55°C/Z+20°C	12	8	5	4	3	4	-	-
WV	4	6.3	10	16	25 ~ 50	63 ~ 100	160 ~ 250	400 ~ 450																													
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Z-40°C/Z+20°C	12	8	5	4	3	4	6	10																													
Z-55°C/Z+20°C	12	8	5	4	3	4	-	-																													
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 ±20% of initial value</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 ±20% of initial value	tanδ	Less than 200% of specified value																														
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tanδ	Less than 200% of specified value																																				
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4																																				
Resistance to soldering heat	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.</p> <table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within ±10% 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 ±10% of initial value	tanδ	Less than specified value																														
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● DRAWING -Series code of JC is "J"

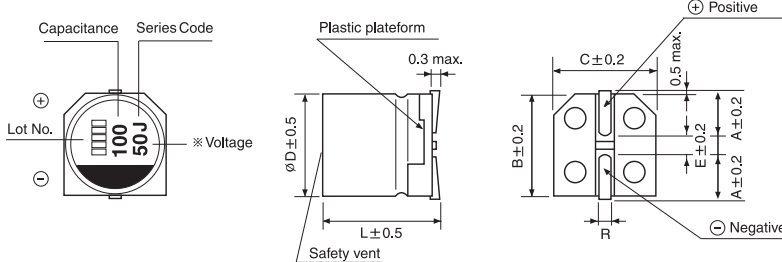
Unit : mm

(∅6.3, ∅8×6.2)

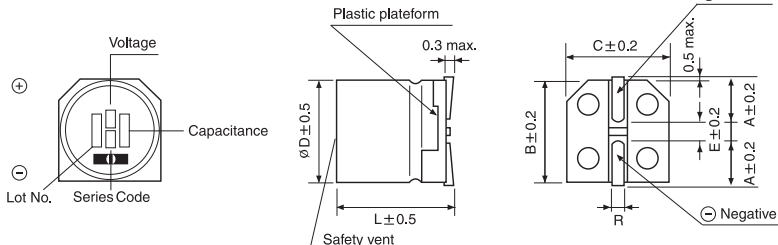


∅D×L	A	B	C	E	R
6.3×5.8	2.4	6.6	6.6	2.2	0.5~0.8
6.3×7.7	2.4	6.6	6.6	2.2	0.5~0.8
8×6.2	3.3	8.3	8.3	2.3	0.5~0.8
8×10	2.9	8.3	8.3	3.1	0.8~1.1
10×10	3.2	10.3	10.3	4.5	0.8~1.1
12.5×13.5	4.6	12.8	12.8	4.5	0.8~1.4

(∅8×10, ∅10×10)



(∅12.5)



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							
33	8×10	110	10×10	120	12.5×13.5	95	← Ripple current (mA rms) at 105°C, 120Hz								
47	10×10	130	12.5×13.5	250	↑ Case size $\varnothing D \times L$ (mm)										
68	10×10	160	12.5×13.5	300											
100	12.5×13.5	270													

● **FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT**

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz \leq
Coefficient	0.70	1.00	1.17	1.36	1.50