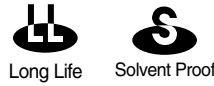


CA Chip type, Long Life, High CV Series



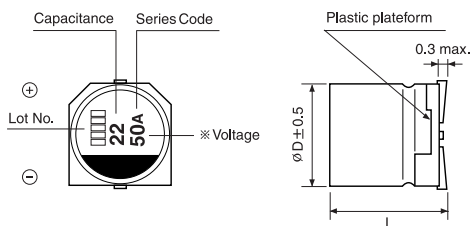
- Chip type, long life capacitance in large case sizes
- Chip type with load life of 5000 hours at +105°C
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive



Item	Characteristics																					
Operating temperature range	-55 ~ +105°C																					
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)																					
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C																					
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <tr> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tanδ</td> <td>0.28</td> <td>0.24</td> <td>0.2</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> </table>	WV	6.3	10	16	25	35	50	tan δ	0.28	0.24	0.2	0.16	0.13	0.12							
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tan δ	0.28	0.24	0.2	0.16	0.13	0.12																
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>WV</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>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>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	WV	6.3	10	16	25	35	50	Z-25°C/Z+20°C	4	3	2	2	2	2	Z-40°C/Z+20°C	10	7	5	3	3	3
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Z-40°C/Z+20°C	10	7	5	3	3	3																
Load life (after application of the rated voltage for 5000 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 $\pm 30\%$ of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than 300% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 30\%$ of initial value	tan δ	Less than 300% of specified value															
Leakage current	Less than specified value																					
Capacitance change	Within $\pm 30\%$ of initial 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	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 30 seconds.</p> <table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within $\pm 10\%$ 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 $\pm 10\%$ of initial value	tan δ	Less than specified value															
Leakage current	Less than specified value																					
Capacitance change	Within $\pm 10\%$ of initial value																					
tan δ	Less than specified value																					

● DRAWING

Unit : mm



* Please refer to drawing for CK Series in page 57 for detail drawing.

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF	WV	6.3	10	16	25	35	50
10							6.3×5.8 30
22					6.3×5.8 38	6.3×5.8 42	6.3×7.7 120
33				6.3×5.8 40	6.3×5.8 48	6.3×7.7 57	8×10 140
47			6.3×5.8 46	6.3×5.8 50	6.3×7.7 63	8×10 92	8×10 170
100	6.3×5.8 60	6.3×7.7 81	6.3×7.7 81	8×10 116	10×10 151	10×10 310	
220	6.3×7.7 101	8×10 141	10×10 216	10×10 216	10×10 216		
330	8×10 160	10×10 238	10×10 238	10×10 238			
470	10×10 254	10×10 254					
1000	10×10 313						

← Ripple current (mA rms) at 105°C, 120Hz
 Case size $\varnothing D \times L$ (mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

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