

# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

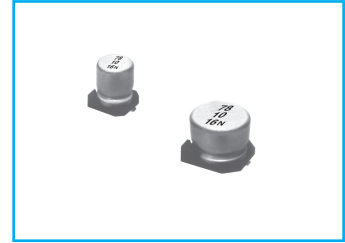


## NC

Chip type, Non-polarized Series

**NP**  
Non-polarized

**S**  
Solvent Proof



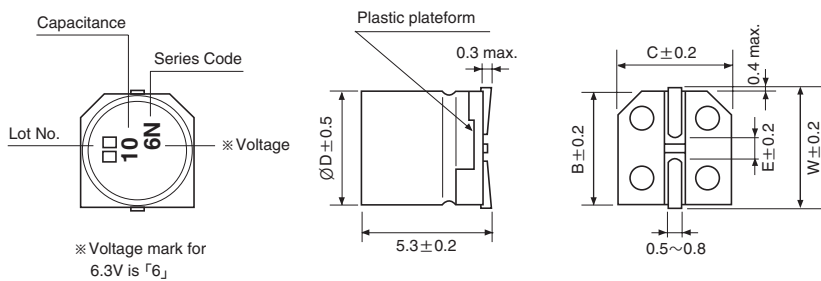
- Chip type with 5.5mmL height
- Designed for surface mounting on high density PC board
- Applicable to automatic mounting machine using carrier tape
- Complied to the RoHS directive



Item	Characteristics																					
Operating temperature range	-40 ~ +85°C																					
Leakage current max.	I = 0.05CV or 10 $\mu$ 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>tan<math>\delta</math></td> <td>0.24</td> <td>0.20</td> <td>0.17</td> <td>0.17</td> <td>0.15</td> <td>0.15</td> </tr> </table>	WV	6.3	10	16	25	35	50	tan $\delta$	0.24	0.20	0.17	0.17	0.15	0.15							
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tan $\delta$	0.24	0.20	0.17	0.17	0.15	0.15																
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>8</td> <td>6</td> <td>4</td> <td>4</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	8	6	4	4	3	3
	WV	6.3	10	16	25	35	50															
	Z-25°C/Z+20°C	4	3	2	2	2	2															
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Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current	Less than specified value																				
	Capacitance change	Within $\pm 20\%$ of initial value																				
	tan $\delta$	Less than 200% of specified value																				
	Test method	Polarity reverse each 250 hours																				
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and tan $\delta$ 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 $\pm 10\%$ of initial value																				
	tan $\delta$	Less than specified value																				

## DRAWING

Unit : mm



$\phi D$	W	B	C	E
4	4.8	4.3	4.3	1.0
5	5.8	5.3	5.3	1.4
6.3	7.1	6.6	6.6	2.2

## DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$	WV	6.3	10	16	25	35	50
0.1							4×5.3 1.0
0.22							4×5.3 2.0
0.33							4×5.3 2.8
0.47							4×5.3 4.0
1.0							4×5.3 8.4
2.2						4×5.3 8.4	5×5.3 13
3.3					5×5.3 12	5×5.3 16	5×5.3 17
4.7				4×5.3 12	5×5.3 16	5×5.3 18	6.3×5.3 20
10			4×5.3 17	5×5.3 23	6.3×5.3 27	6.3×5.3 29	
22	5×5.3	28	6.3×5.3 33	6.3×5.3 37			
33	6.3×5.3	37	6.3×5.3 41	6.3×5.3 49			
47	6.3×5.3	45					

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

CHIP TYPES