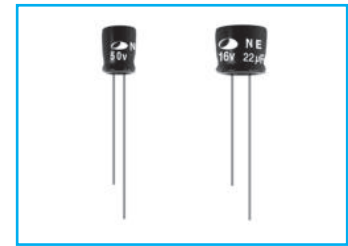


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**NE** Non-Polarized, Height 5mmL Series

**M** Miniaturized    **NP** Non-polarized    **S** Solvent Proof



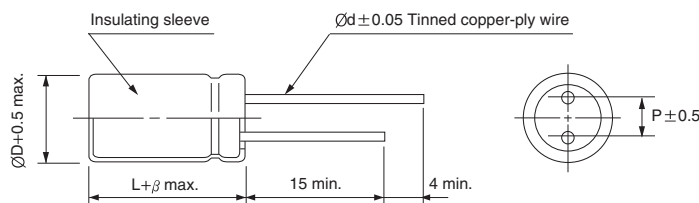
- Non-polarized and low profile series with 5mmL height
- Uniquely designed for use in lightweight and portable equipment
- Complied to the RoHS directive



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	
	WV	6.3	10	16	25	35	50									
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, 25</td> <td>35, 50</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>4</td> <td>3</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>3</td> </tr> </table>	WV	6.3	10	16, 25	35, 50	Z-25°C/Z+20°C	4	3	2	2	Z-40°C/Z+20°C	8	6	4	3
	WV	6.3	10	16, 25	35, 50											
	Z-25°C/Z+20°C	4	3	2	2											
Z-40°C/Z+20°C	8	6	4	3												
Load life (after application of the rated voltage for 1000 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. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4															

## DRAWING

Unit : mm



ØD	4	5	6.3
P	1.5	2.0	2.5
Ød	0.45	0.45	0.45
β	1.0	1.5	

## DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

µF \ WV	6.3		10		16		25		35		50	
1.0											4×5	10
1.5											4×5	12
2.2							4×5	14	4×5	15	5×5	17
3.3							5×5	20	5×5	21	5×5	21
4.7					4×5	21	5×5	24	5×5	25	6.3×5	30
6.8					5×5	29	6.3×5	33	6.3×5	36	6.3×5	36
10			4×5	28	5×5	35	6.3×5	41	6.3×5	43		
15	4×5	31	5×5	39	6.3×5	50						
22	5×5	43	6.3×5	55	6.3×5	60						
33	6.3×5	62	6.3×5	68								
47	6.3×5	74										

↑ ↑  
Ripple current (mA rms) at 85°C, 120Hz  
Case size ØD×L (mm)

## FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	1kHz	10kHz $\leq$
Coefficient	0.75	1.00	1.55	2.00