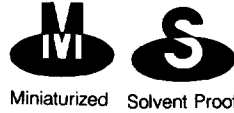


# Miniature Aluminum Electrolytic Capacitors



## RY Miniaturized, For Switching Power Supplies Series

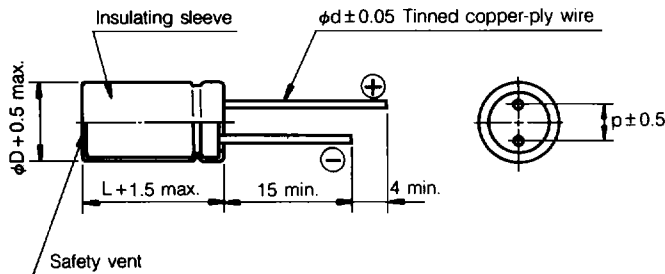
- Smaller case sizes than RX series
- Suited for use in compact DC-DC converters
- Wide operating temperature range of  $-55 \sim +105^{\circ}\text{C}$
- Load life of 2000 hours at  $105^{\circ}\text{C}$



Item	Characteristics															
Operating temperature range	$-55 \sim +105^{\circ}\text{C}$															
Leakage current max.	$I = 0.01\text{CV}$ or $3\mu\text{A}$ whichever is greater (after 2 minutes) $I = 0.03\text{CV}$ or $4\mu\text{A}$ whichever is greater (after 1 minute)															
Capacitance tolerance	$\pm 20\%$ at 120Hz, $20^{\circ}\text{C}$															
Dissipation factor max. (at 120Hz, $20^{\circ}\text{C}$ )	Capacitance $> 1000\mu\text{F}$ : $\tan\delta$ increases by 0.02 for each $1000\mu\text{F}$ from below value.															
	<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> <td>63</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.13</td> <td>0.10</td> <td>0.09</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	$\tan\delta$	0.26	0.22	0.18	0.16	0.13	0.10
WV	6.3	10	16	25	35	50	63									
$\tan\delta$	0.26	0.22	0.18	0.16	0.13	0.10	0.09									
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 ~ 63</td> </tr> <tr> <td>Z - <math>25^{\circ}\text{C}/Z + 20^{\circ}\text{C}</math></td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z - <math>40^{\circ}\text{C}/Z + 20^{\circ}\text{C}</math></td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> </tr> </table>	WV	6.3	10	16	25 ~ 63	Z - $25^{\circ}\text{C}/Z + 20^{\circ}\text{C}$	4	3	2	2	Z - $40^{\circ}\text{C}/Z + 20^{\circ}\text{C}$	8	6	4	3
	WV	6.3	10	16	25 ~ 63											
	Z - $25^{\circ}\text{C}/Z + 20^{\circ}\text{C}$	4	3	2	2											
Z - $40^{\circ}\text{C}/Z + 20^{\circ}\text{C}$	8	6	4	3												
Load life (after application of the rated voltage for 2000 hours at $105^{\circ}\text{C}$ )	Leakage current	Less than specified value														
	Capacitance change	Within $\pm 20\%$ of initial value														
	$\tan\delta$	Less than 200% of specified value														
Shelf life (at $105^{\circ}\text{C}$ )	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.															

### ● DRAWING

Unit : mm



$\phi D$	10	13	16	18
p	5.0	5.0	7.5	7.5
$\phi d$	0.6	0.6	0.8	0.8

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT mA (rms) at 120Hz, $105^{\circ}\text{C}$

$\phi D \times L$  (mm) : mA (rms)

$\mu\text{F}$ \backslash WV							
	6.3	10	16	25	35	50	63
68							10 × 12.5 193
100						10 × 12.5 207	10 × 16 257
150					10 × 12.5 219	10 × 16 278	10 × 20 343
220				10 × 12.5 246	10 × 12.5 266	10 × 20 367	13 × 16 450
330			10 × 12.5 282	10 × 16 330	10 × 16 357	13 × 16 486	13 × 20 598
470		10 × 12.5 317	10 × 16 369	10 × 20 430	10 × 20 464	13 × 20 629	13 × 25 778
680	10 × 12.5 345	10 × 16 418	10 × 16 443	13 × 16 559	13 × 20 656	13 × 25 825	16 × 25 1038
1000	10 × 16 458	10 × 16 507	10 × 20 587	13 × 20 736	13 × 25 867	16 × 25 1110	16 × 31.5 1377
1500	10 × 20 587	10 × 20 643	13 × 20 795	13 × 25 919	16 × 25 1090	16 × 31.5 1346	18 × 40 1758
2200	13 × 20 801	13 × 20 871	13 × 25 996	16 × 25 1165	16 × 31.5 1351	18 × 40 1771	
3300	13 × 20 945	13 × 25 1113	16 × 25 1290	16 × 35.5 1554	18 × 35.5 1776		
4700	16 × 25 1319	16 × 25 1416	16 × 31.5 1613	18 × 40 1990			
6800	16 × 25 1490	16 × 31.5 1735	16 × 40 1980				
10000	16 × 31.5 1822	18 × 35.5 2187					
15000	18 × 35.5 2272						