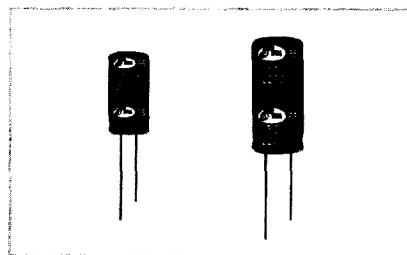


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RS Long Life (7000 hours at 105°C) Series

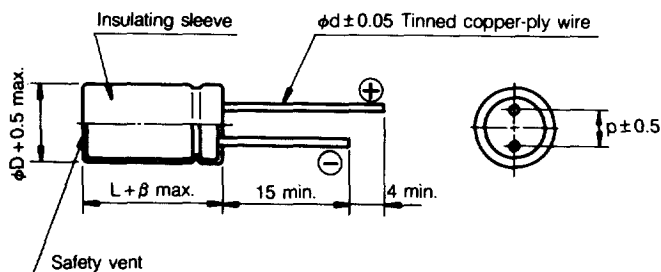
- Load life of 7000 hours at 105°C
- High performance
- High ripple capability
- Designed for use in switching power supplies



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)	Capacitance > 1000 $\mu F$ : $\tan\delta$ increases by 0.02 for each 1000 $\mu F$ from below value													
	<table border="1"> <tr> <td>WV</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>0.30</td> <td>0.25</td> <td>0.22</td> <td>0.18</td> <td>0.15</td> <td>0.12</td> </tr> </table>	WV	10	16	25	35	50	63	$\tan\delta$	0.30	0.25	0.22	0.18	0.15
WV	10	16	25	35	50	63								
$\tan\delta$	0.30	0.25	0.22	0.18	0.15	0.12								
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>WV</td> <td>10</td> <td>16</td> <td>25 ~ 63</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>5</td> <td>4</td> <td>3</td> </tr> </table>	WV	10	16	25 ~ 63	Z-25°C/Z+20°C	2	2	2	Z-40°C/Z+20°C	5	4	3	
	WV	10	16	25 ~ 63										
	Z-25°C/Z+20°C	2	2	2										
Z-40°C/Z+20°C	5	4	3											
Load life (after application of the rated voltage for 7000 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 <math>\pm 30\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>Less than 300% of specified value</td> </tr> </table> <p><math>\phi 8</math> products are for 5000 hours</p>	Leakage current	Less than specified value	Capacitance change	Within $\pm 30\%$ of initial value	$\tan\delta$	Less than 300% of specified value							
Leakage current	Less than specified value													
Capacitance change	Within $\pm 30\%$ of initial value													
$\tan\delta$	Less than 300% of specified value													
Shelf life (after leaving capacitors under no load at 105°C for 1000 hours)	<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within <math>\pm 15\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>Less than 150% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 15\%$ of initial value	$\tan\delta$	Less than 150% of specified value							
	Leakage current	Less than specified value												
	Capacitance change	Within $\pm 15\%$ of initial value												
$\tan\delta$	Less than 150% of specified value													

### ● DRAWING

Unit : mm



$\phi D$	8	10	13	16	18
P	3.5	5.0	5.0	7.5	7.5
$\phi d$	0.6	0.6	0.6	0.8	0.8
$\beta$	1.0		1.5		

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$ \ WV	10	16	25	35	50	63
4.7					8 × 11.5	33
10					8 × 11.5	49
22					8 × 11.5	72
33				8 × 11.5	10 × 12.5	103
47			8 × 11.5	8 × 11.5	10 × 12.5	123
100	8 × 11.5	98	8 × 11.5	10 × 12.5	10 × 16	214
220	10 × 12.5	168	10 × 12.5	10 × 16	13 × 20	373
330	10 × 16	226	10 × 16	10 × 20	13 × 20	457
470	10 × 16	269	10 × 20	13 × 20	16 × 25	659
1000	13 × 20	503	13 × 20	16 × 25	16 × 31.5	1184
2200	16 × 25	847	16 × 25	16 × 35.5	18 × 35.5	
3300	16 × 31.5	1103	16 × 35.5	18 × 40		
4700	16 × 35.5	1345	18 × 35.5	1548		

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