

## RB High Temperature Range, For 125°C Use Series

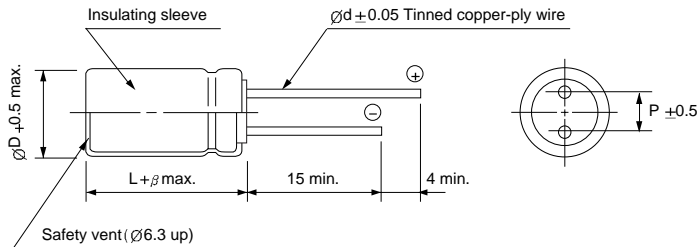
- Load life of 2000 hours at 125°C
- Extremely low impedance at high frequency
- For automobile modules and other high temperature applications



Item	Characteristics													
<b>Operating temperature range</b>	-55 ~ +125°C													
<b>Leakage current max.</b>	I = 0.01CV or 3 $\mu$ A whichever is greater (after 2 minutes) I = 0.03CV or 4 $\mu$ A whichever is greater (after 1 minute)													
<b>Capacitance tolerance</b>	$\pm 20\%$ at 120Hz, 20°C													
<b>Dissipation factor max. (at 120Hz, 20°C)</b>	Capacitance > 1000 $\mu$ F : $\tan \delta$ increases by 0.02 for each 1000 $\mu$ F from below value.													
	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td><math>\tan \delta</math></td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	$\tan \delta$	0.22	0.19	0.16	0.14	0.12
WV	6.3	10	16	25	35	50								
$\tan \delta$	0.22	0.19	0.16	0.14	0.12	0.10								
<b>Low temperature characteristics (Impedance ratio at 120Hz)</b>	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3 ~ 10</th> <th>16 ~ 50</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>5</td> <td>4</td> </tr> </tbody> </table>	WV	6.3 ~ 10	16 ~ 50	Z-25°C/Z+20°C	3	2	Z-40°C/Z+20°C	5	4				
	WV	6.3 ~ 10	16 ~ 50											
	Z-25°C/Z+20°C	3	2											
Z-40°C/Z+20°C	5	4												
<b>Load life (after application of the rated voltage for 2000 hours at 125°C)</b>	<table border="1"> <tbody> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within <math>\pm 20\%</math> of initial value</td> </tr> <tr> <td><math>\tan \delta</math></td> <td>Less than 300% of specified value</td> </tr> </tbody> </table> <p><math>\varnothing 5, 6.3</math> and <math>\varnothing 8</math> products are for 1000 hours</p>	Leakage current	Less than specified value	Capacitance change	Within $\pm 20\%$ of initial value	$\tan \delta$	Less than 300% of specified value							
Leakage current	Less than specified value													
Capacitance change	Within $\pm 20\%$ of initial value													
$\tan \delta$	Less than 300% of specified value													
<b>Shelf life (at 125°C)</b>	After 1000 hours no load test, leakage current, capacitance and $\tan \delta$ are same as load life value.													

### ● DRAWING

Unit : mm



$\varnothing D$	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
$\varnothing d$	0.5	0.5	0.6	0.6	0.6	0.8	0.8
$\beta$	1.0			2.0			

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**RB** series

## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16		
	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
33									
47							5×11	1.0	124
68				5×11	1.0	124	6.3×11	0.65	176
100	5×11	1.1	120	6.3×11	0.71	168	6.3×11	0.45	212
150	6.3×11	0.64	180	6.3×11	0.45	212	8×11.5	0.30	310
220	6.3×11	0.39	228	8×11.5	0.31	310	8×11.5	0.21	368
330	8×11.5	0.26	234	8×11.5	0.21	368	10×12.5	0.16	500
470	10×12.5	0.18	460	10×12.5	0.17	480	10×16	0.12	616
680	10×16	0.14	560	10×16	0.12	616	10×20	0.085	816
1000	10×20	0.097	760	10×20	0.078	848	12.5×20	0.061	1129
1500	10×25	0.071	976	12.5×20	0.059	1134	12.5×25	0.047	1328
2200	12.5×20	0.056	1150	12.5×25	0.044	1368	16×20	0.043	1440
3300	12.5×25	0.044	1368	16×20	0.040	1480	16×25	0.035	1676
4700	16×25	0.042	1548	16×31.5	0.030	1936	16×35.5	0.026	2144
6800	16×31.5	0.031	1896	16×35.5	0.026	2144	18×35.5	0.023	2320
10000	16×40	0.026	2200	18×40	0.022	2432			
15000	18×40	0.023	2368						

WV Item μF	25			35			50		
	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
1.0							5×11	5.2	29
1.5							5×11	4.9	36
2.2							5×11	4.5	43
3.3							5×11	3.9	53
4.7							5×11	2.9	65
6.8							5×11	2.3	73
10							5×11	1.8	92
15							5×11	1.2	116
22				5×11	0.97	128	6.3×11	0.84	156
33	5×11	1.0	124	6.3×11	0.64	180	6.3×11	0.56	192
47	6.3×11	0.72	168	6.3×11	0.44	216	8×11.5	0.39	275
68	6.3×11	0.47	208	8×11.5	0.31	307	8×11.5	0.26	328
100	8×11.5	0.31	306	8×11.5	0.21	368	10×16	0.21	465
150	8×11.5	0.21	368	10×12.5	0.16	500	10×20	0.13	656
220	10×12.5	0.17	480	10×16	0.12	616	10×25	0.098	832
330	10×16	0.12	600	10×20	0.078	848	12.5×20	0.072	1025
470	10×20	0.084	816	12.5×20	0.060	1121	12.5×25	0.057	1200
680	12.5×20	0.060	1114	12.5×25	0.047	1328	16×20	0.052	1304
1000	12.5×25	0.047	1328	16×20	0.044	1416	16×31.5	0.039	1696
1500	16×20	0.044	1416	16×31.5	0.036	1908	16×40	0.034	1928
2200	16×25	0.036	1641	16×35.5	0.026	2144	18×40	0.031	2048
3300	16×35.5	0.026	2144	18×40	0.022	2432			
4700	18×40	0.023	2368						