

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

Upgrade

**RB**

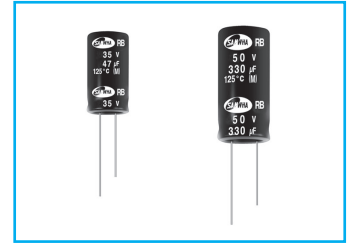
High Temperature, For 125°C Use Series

- Load life of 2000 hours at 125°C
- For Electronic Control unit and other high temperature applications
- Complied to the RoHS directive



Solvent Proof  
WV ≤ 100V

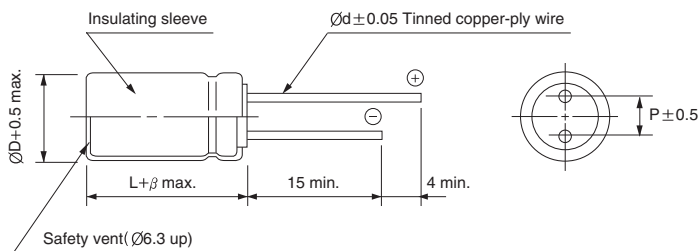
**RB** → **VA**  
High Temp.



Item	Characteristics																	
Operating temperature range	WV ≤ 50: -55 ~ +125°C, WV ≥ 63: -40 ~ +125°C																	
Leakage current max.	WV ≤ 50: I = 0.01CV or 3µA whichever is greater (after 2 minutes) WV ≥ 63: 0.03CV + 10µA (after 5 minutes)																	
Capacitance tolerance	±20% at 120Hz, 20°C																	
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000µF : tanδ increases by 0.02 for each 1000µF from below value.																	
	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63 ~ 100</th> <th>160 ~ 250</th> </tr> </thead> <tbody> <tr> <td>tanδ</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> <td>0.08</td> <td>0.15</td> </tr> </tbody> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	63 ~ 100	160 ~ 250	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.08
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Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3 ~ 10</th> <th>16 ~ 250</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 ~ 250	Z-25°C/Z+20°C	3	2	Z-40°C/Z+20°C	5	4								
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Load life (after application of the rated voltage for 2000 hours at 125°C)	<p>∅5, 6.3 and WV ≥ 100 products are for 1000 hours</p>																	
Shelf life (at 125°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4																	

## DRAWING

Unit : mm



∅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
∅d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5		2.0				

## FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	µF	Frequency					
		60Hz	120Hz	1kHz	10kHz	50kHz	100kHz ≤
6.3-100	~ 47	0.38	0.50	0.78	1.00	1.00	1.00
	68 ~ 680	0.46	0.57	0.77	0.86	0.93	1.00
	1000 ~	0.57	0.67	0.77	0.77	0.88	1.00
160-250	0.47 ~ 220	0.44	0.56	0.78	0.89	0.94	1.00
	330 ~	0.60	0.67	0.75	0.77	0.88	1.00

**RB** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3		10		16	
	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz
47					5×11	165
68			5×11	165	6.3×11	230
100	5×11	160	6.3×11	220	6.3×11	280
150	6.3×11	240	6.3×11	280	8×11.5	410
220	6.3×11	300	8×11.5	410	8×11.5	485
330	8×11.5	310	8×11.5	485	10×12.5	660
470	10×12.5	605	10×12.5	635	10×16	815
680	10×16	740	10×16	815	10×20	1075
1000	10×20	1005	10×20	1120	12.5×20	1490
1500	10×25	1290	12.5×20	1495	12.5×25	1755
2200	12.5×20	1520	12.5×25	1805	16×20	1900
3300	12.5×25	1805	16×20	1955	16×25	2210
4700	16×25	2045	16×31.5	2555	16×35.5	2830
6800	16×31.5	2505	16×35.5	2830	18×35.5	3060
10000	16×40	2905	18×40	3210		
15000	18×40	3125				

WV Item μF	25		35		50	
	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Ripple current (mA rms) 125°C 100kHz
1.0					5×11	40
1.5					5×11	50
2.2					5×11	55
3.3					5×11	70
4.7					5×11	85
6.8					5×11	95
10					5×11	120
15					5×11	155
22			5×11	170	6.3×11	205
33	5×11	165	6.3×11	240	6.3×11	255
47	6.3×11	220	6.3×11	285	8×11.5	365
68	6.3×11	275	8×11.5	405	8×11.5	435
100	8×11.5	405	8×11.5	485	10×16	615
150	8×11.5	485	10×12.5	660	10×20	865
220	10×12.5	635	10×16	815	10×25	1100
330	10×16	790	10×20	1120	12.5×20	1330
470	10×20	1075	12.5×20	1480	12.5×25	1585
680	12.5×20	1470	12.5×25	1755	16×20	1720
1000	12.5×25	1755	16×20	1870	16×31.5	2240
1500	16×20	1870	16×31.5	2520	16×40	2545
2200	16×25	2165	16×35.5	2830	18×40	2705
3300	16×35.5	2830	18×40	3210		
4700	18×40	3125				

MINIATURE TYPES

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**RB** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	63		100		160	
	ØD×L (mm)	Ripple current (mA rms) 125°C 100kHz	ØD×L (mm)	Ripple current (mA rms) 125°C 100kHz	ØD×L (mm)	Ripple current (mA rms) 125°C 100kHz
1.0			8×11.5	25	10×12.5	20
2.0			8×12.5	45	10×16	32
3.3			10×16	60	10×16	42
4.7			10×16	70	10×20	50
10	8×11.5	80	10×20	110	12.5×20	85
22	10×16	150	12.5×25	205	16×25	155
33	10×20	200	16×25	280	16×31.5	210
47	12.5×20	280	16×31.5	370		
100	12.5×25	445				

WV Item μF	200		250	
	ØD×L (mm)	Ripple current (mA rms) 125°C 100kHz	ØD×L (mm)	Ripple current (mA rms) 125°C 100kHz
1.0	10×12.5	20	10×12.5	18
2.0	10×16	32	10×16	32
3.3	10×20	42	10×20	42
4.7	10×20	50	12.5×20	60
10	12.5×20	95	16×25	105
22	16×31.5	170		