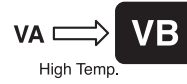
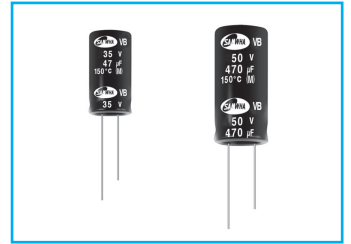


## VB 155°C, High Temp, High Reliability Series

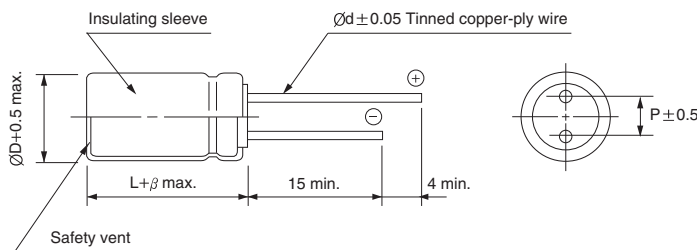
- Load life of 1000 hours at 155°C use
- For Electronic Control Unit and other high temperature applications
- Complied to the RoHS directive



Item	Characteristics																											
Operating temperature range	-40 ~ +155°C																											
Leakage current max.	$I = 0.03CV$ or $4\mu A$ whichever is greater (after 1 minute)																											
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"> <thead> <tr> <th>Rated Voltage(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td><math>\tan\delta</math></td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table>	Rated Voltage(V)	10	16	25	35	50	63	80	100	$\tan\delta$	0.20	0.16	0.14	0.12	0.10	0.10	0.08	0.08									
Rated Voltage(V)	10	16	25	35	50	63	80	100																				
$\tan\delta$	0.20	0.16	0.14	0.12	0.10	0.10	0.08	0.08																				
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	WV	10	16	25	35	50	63	80	100	Z-25°C/Z+20°C	3	2	2	2	2	2	2	2	Z-40°C/Z+20°C	4	4	4	4	4	4	4	4
	WV	10	16	25	35	50	63	80	100																			
	Z-25°C/Z+20°C	3	2	2	2	2	2	2	2																			
Z-40°C/Z+20°C	4	4	4	4	4	4	4	4																				
<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 30\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>Less than 300% of specified value</td> </tr> </tbody> </table>	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 (at 155°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	10	12.5	16	18
P	5.0	5.0	7.5	7.5
Ød	0.6	0.6	0.8	0.8
β	2.0			

### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

CV \ Frequency	120Hz	1kHz	50kHz	100kHz ≤
1000 ≤ CV	0.67	0.91	0.95	1.00
1000 > CV	0.50	0.83	0.91	1.00

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**VB** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	10		16		25		35	
	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz
22							10 × 12.5	200
33							10 × 12.5	225
47							10 × 12.5	250
100					10 × 12.5	250	10 × 20	400
220			10 × 16	300	12.5 × 20	500	12.5 × 25	600
330	10 × 16	300	10 × 20	400	12.5 × 25	600	16 × 25	800
470	10 × 20	400	12.5 × 20	600	16 × 25	800	16 × 31.5	1000
1000	12.5 × 25	600	16 × 25	800	16 × 31.5	1000	18 × 40	1300
2200	16 × 31.5	1000	18 × 35.5	1200				
3300	18 × 35.5	1200	18 × 40	1300				
4700	18 × 40	1300						

WV Item μF	50		63		80		100	
	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz	∅D×L(mm)	Ripple current (mA rms) 155°C, 100kHz
22							10 × 12.5	390
33					10 × 12.5	420	10 × 16	510
47					10 × 16	550	10 × 20	640
56			10 × 12.5	430	10 × 20	690	10 × 20	640
68			10 × 16	560	10 × 20	690	12.5 × 20	760
100	10 × 16	380	10 × 20	710	12.5 × 20	820	12.5 × 25	950
220	12.5 × 20	640	12.5 × 25	1040	16 × 25	1250	16 × 31.5	1380
330	16 × 20	770	16 × 20	1080	16 × 31.5	1480	18 × 31.5	1430
470	16 × 25	960	16 × 25	1280	18 × 31.5	1530		
560	16 × 31.5	1080	16 × 31.5	1520				
680	18 × 25	1190	16 × 35.5	1520				
1000	18 × 31.5	1420						