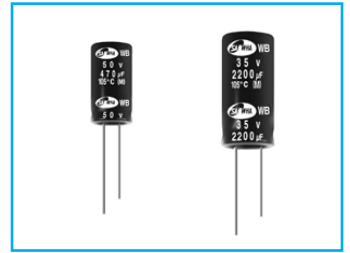


WB Ultra Low Impedance Series

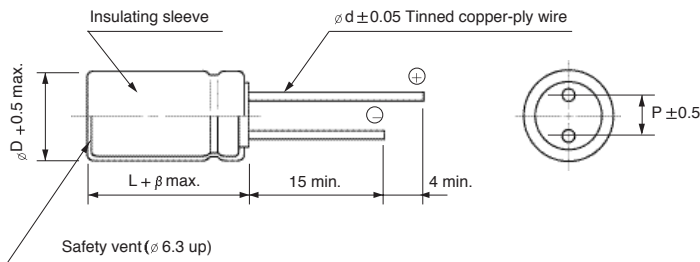
- Low impedance compared with WD series
- Enabled high ripple current by a reduction of impedance at high frequency
- High reliability withstanding 5000 hours load life at 105°C (2000 ~ 4000 hours for smaller case sizes as specified below)
- For switching power supplies, noise filter, adapter, charger



Item	Characteristics																	
Operating temperature range	-40 ~ +105°C																	
Leakage current max.	I = 0.01CV or 3 μ A whichever is greater (after 2 minutes) I = 0.03CV or 4 μ A whichever is greater (after 1 minute)																	
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C																	
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000 μ F : tan δ increases by 0.02 for each 1000 μ 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> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tan δ</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>0.09</td> <td>0.08</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	100	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09
WV	6.3	10	16	25	35	50	63	100										
tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08										
Low temperature characteristics (Impedance ratio at 120Hz)	Z-40°C / Z+20°C																	
	Z-25°C / Z+20°C																	
Load life (after application of the rated voltage for 5000 hours at 105°C)	Leakage current																	
	Capacitance change																	
	tan δ																	
	$\phi 5, 6.3$: 2000 hours, $\phi 8$: 3000 hours, $\phi 10$: 4000 hours																	
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tan δ are same as load life value.																	

DRAWING

Unit : mm



ϕD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ϕd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.0			2.0			

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

WB series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16			25		
	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
4.7										5 × 11	0.35	250
10							5 × 11	0.35	250	5 × 11	0.35	250
22	5 × 11	0.35	250	5 × 11	0.35	250	5 × 11	0.35	250	5 × 11	0.35	250
33	5 × 11	0.35	250	5 × 11	0.35	250	5 × 11	0.35	250	5 × 11	0.35	250
47	5 × 11	0.30	250	5 × 11	0.30	250	5 × 11	0.30	250	5 × 11	0.30	250
100	5 × 11	0.30	250	5 × 11	0.30	250	6.3 × 11	0.15	405	6.3 × 11	0.15	405
150	6.3 × 11	0.15	405	6.3 × 11	0.15	405	6.3 × 11	0.15	405	8 × 11.5	0.072	760
220	6.3 × 11	0.15	405	6.3 × 11	0.15	405	8 × 11.5	0.072	760	8 × 11.5	0.072	760
330	6.3 × 11	0.15	405	8 × 11.5	0.072	760	8 × 11.5	0.072	760	10 × 12.5	0.053	1030
470	8 × 11.5	0.072	760	8 × 11.5	0.072	760	10 × 12.5	0.053	1030	10 × 16	0.038	1430
680	10 × 12.5	0.053	1030	10 × 12.5	0.053	1030	10 × 16	0.038	1430	10 × 20	0.027	1820
1000	10 × 12.5	0.053	1030	10 × 16	0.038	1430	10 × 20	0.027	1820	12.5 × 20	0.025	2360
1500	10 × 20	0.027	1820	10 × 20	0.027	1820	12.5 × 20	0.025	2360	16 × 20	0.015	3460
2200	12.5 × 20	0.025	2360	12.5 × 20	0.025	2360	12.5 × 25	0.018	2770	16 × 25	0.015	3460
3300	12.5 × 20	0.025	2360	12.5 × 25	0.018	2770	16 × 25	0.015	3460	16 × 31.5	0.015	3680
4700	16 × 25	0.015	3460	16 × 25	0.015	3460	16 × 31.5	0.015	3680	18 × 35.5	0.014	3800
6800	16 × 25	0.015	3460	16 × 31.5	0.015	3680	18 × 35.5	0.014	3800			
10000	16 × 31.5	0.015	3680	18 × 35.5	0.014	3800						
15000	18 × 35.5	0.014	3800									

WV Item μF	35			50			63			100		
	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	∅ D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
0.47				5 × 11	2.0	250						
1.0				5 × 11	2.0	250						
2.2				5 × 11	2.0	250				5 × 11	2.0	125
3.3				5 × 11	1.0	250	5 × 11	2.0	165	5 × 11	2.0	125
4.7	5 × 11	0.35	250	5 × 11	1.0	250	5 × 11	2.0	165	5 × 11	2.0	125
10	5 × 11	0.35	250	5 × 11	0.50	250	5 × 11	0.45	165	6.3 × 11	0.50	205
22	5 × 11	0.35	250	5 × 11	0.26	250	6.3 × 11	0.30	265	8 × 11.5	0.30	355
33	5 × 11	0.30	250	6.3 × 11	0.17	405	6.3 × 11	0.30	265	10 × 12.5	0.25	450
47	6.3 × 11	0.15	405	6.3 × 11	0.14	405	8 × 11.5	0.20	500	10 × 16	0.20	580
100	8 × 11.5	0.072	760	8 × 11.5	0.072	760	10 × 16	0.10	945	12.5 × 20	0.10	1045
150	8 × 11.5	0.072	760	10 × 12.5	0.061	1030	10 × 20	0.08	1100	12.5 × 25	0.070	1195
220	10 × 12.5	0.053	1030	10 × 16	0.038	1430	10 × 25	0.07	1300	16 × 25	0.060	1600
330	10 × 16	0.038	1430	10 × 20	0.032	1820	12.5 × 20	0.04	1495	16 × 31.5	0.040	1750
470	10 × 20	0.027	1820	12.5 × 20	0.025	2360	16 × 20	0.035	1990	18 × 40	0.030	2060
680	12.5 × 20	0.025	2360	12.5 × 25	0.020	2770	16 × 25	0.030	2780			
1000	12.5 × 25	0.018	2770	16 × 25	0.018	3460	16 × 35.5	0.020	2835			
1500	16 × 25	0.015	3460	16 × 31.5	0.015	3680						
2200	16 × 31.5	0.015	3680	18 × 35.5	0.014	3800						
3300	18 × 35.5	0.014	3800									