

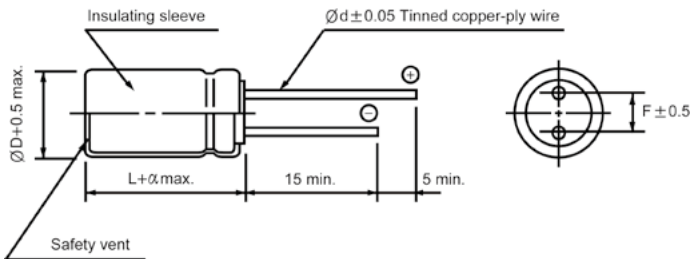
BW High Temperature Range, For +135°C Use Series

- Highly dependable reliability withstanding load life of 1000 to 3000 hours at 135°C
- Suited for automobile electronics where heavy duty services are indispensable
- Complied to the RoHS directive

Items	Performance characteristics																											
Operating temperature range	-55 ~ +135°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 μF : $\tan\delta$ increases by 0.02 for each 1000 μF 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> <td>80</td> <td>100</td> </tr> <tr> <td>Tanδ</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> </table>	WV	10	16	25	35	50	63	80	100	Tan δ	0.20	0.16	0.14	0.12	0.10	0.10	0.08	0.08									
WV	10	16	25	35	50	63	80	100																				
Tan δ	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"> <tr> <td>WV</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <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> </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																				
Leakage current	Less than specified value																											
Capacitance change	Within $\pm 30\%$ of initial value																											
Tan δ	Less than 300% of specified value																											
Load life (after application of the rated voltage for 3000 hours at 135°C)	$\Phi 8$:1000 hours; $\Phi 10$:2000 hours; $\geq \Phi 12.5$:3000 hours.																											
Shelf life (at 135°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.																											

● DRAWING

Unit : mm



ΦD	8	10	12.5	16
F	3.5	5.0	5.0	7.5
Φd	0.5	0.6	0.8	
α	1.5	2.0		

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

V	Frequency				
	CV	120Hz	300Hz	1kHz	10kHz≤
10 ~ 100	1000>CV	0.50	0.64	0.83	1.00
	1000≤CV	0.67	0.79	0.91	1.00

BW Series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	10			16			25			35		
	100				8×11.5	0.32	340	8×11.5	0.13	500	10×12.5	0.150
220	8×11.5	0.26	340	10×12.5	0.15	620	10×12.5	0.10	680	10×16	0.094	790
330	10×12.5	0.15	620	10×12.5	0.10	680	10×16	0.075	945	10×20	0.075	950
470	10×12.5	0.10	680	10×16	0.075	945	10×20	0.057	1100	12.5×20	0.058	1330
1000	10×20	0.057	1100	12.5×20	0.042	1490	12.5×25	0.033	1750	16×25	0.031	2010
2200	12.5×25	0.033	1750	16×25	0.024	2300	16×31.5	0.020	2710			
3300	16×25	0.024	2300	16×31.5	0.020	2710						
4700	16×31.5	0.020	2710									

WV μF	50			63			80			100		
	4.7	8×11.5	1.15	85								
10	8×11.5	0.75	180							8×11.5	1.50	150
22	8×11.5	0.50	250	8×11.5	2.00	130	8×11.5	1.50	150	10×12.5	0.80	480
33	8×11.5	0.45	300	8×11.5	1.50	150	10×12.5	0.80	480	10×12.5	0.80	480
47	8×11.5	0.35	440	10×12.5	0.59	530	10×12.5	0.80	480	10×16	0.55	630
100	10×12.5	0.18	555	10×16	0.41	690	10×20	0.39	790	12.5×20	0.25	990
220	10×20	0.098	930	12.5×20	0.16	1050	12.5×25	0.18	1240	16×25	0.11	1500
330	12.5×20	0.070	1330	12.5×25	0.12	1290	12.5×31.5	0.16	1390	16×31.5	0.079	1790
470	12.5×25	0.055	1650	12.5×31.5	0.097	1460	16×25	0.11	1500			
1000	16×31.5	0.031	2430	▲ 16×31.5	▲ 0.055	▲ 1900						

_____ Ripple current (mA rms) at 135°C , 100kHz
 _____ Impedance (Ω) max. at 20°C , 100kHz
 _____ Case size ΦD×L(mm)