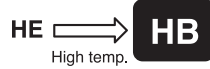


# LARGE ALUMINUM ELECTROLYTIC CAPACITORS

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

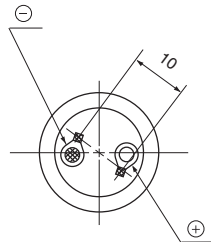
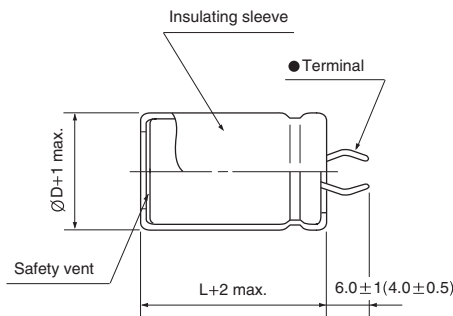
- Wide operating temperature range of -40 ~ +125°C
- With a guaranteed useful life of 10 years at 60°C
- Ideal for industrial applications requiring continuous operation
- Complied to the RoHS directive



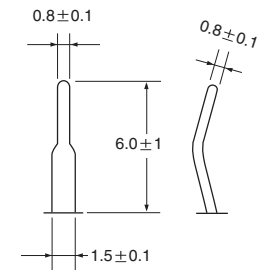
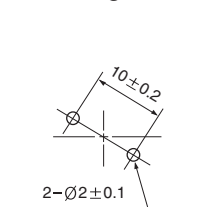
Item	Characteristics															
Operating temperature range	-40 ~ +125°C															
Capacitance tolerance	±20% at 120Hz, 20°C															
Leakage current max.	$I=3\sqrt{CV}$ (µA) (after 5 minutes)															
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000µF : $\tan\delta$ increases by 0.01 for each 1000µF from below value.															
	<table border="1"> <thead> <tr> <th>WV</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50, 63</th> <th>80 ~ 160</th> <th>200, 250</th> </tr> </thead> <tbody> <tr> <td><math>\tan\delta</math></td> <td>0.50</td> <td>0.40</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> </tr> </tbody> </table>	WV	10	16	25	35	50, 63	80 ~ 160	200, 250	$\tan\delta$	0.50	0.40	0.30	0.25	0.20	0.17
WV	10	16	25	35	50, 63	80 ~ 160	200, 250									
$\tan\delta$	0.50	0.40	0.30	0.25	0.20	0.17	0.15									
Load life (after application of the rated voltage for 1000 hours at 125°C)	Leakage current	Less than specified value														
	Capacitance change	Within ±20% of initial value														
	$\tan\delta$	Less than 200% of specified value														
Shelf life (at 125°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



### ● Terminal



\* Shorter terminal(4.0±0.5) is also available upon request.  
Terminal length of height 20mm products is applied shorter terminal to standard terminal type.

### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ≤
~ 100	0.85	1.00	1.06	1.15	1.20
160 ~	0.85	1.00	1.20	1.25	1.45

## HB series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF / ØD	10				16				25			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
1500									22×30 0.95			
2200					22×30 1.00				22×40 1.28	25.4×30 1.26		
3300	22×30 1.09				22×40 1.36	25.4×35 1.41			22×50 1.72	25.4×40 1.72	30×30 1.68	
4700	22×40 1.45	25.4×35 1.51			22×50 1.78	25.4×40 1.77	30×30 1.74			25.4×50 2.23	30×40 2.22	35×30 2.17
6800	22×50 1.91	25.4×40 1.91	30×35 1.97				30×40 2.31	35×30 2.26			30×50 2.90	35×40 2.87
10000			30×45 2.62	35×35				35×45 3.14				
15000				35×45 3.44								

WV μF / ØD	35				50				63			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
470									22×35 0.69	25.4×30 0.71		
680					22×30 0.78				22×40 0.87	25.4×35 0.91	30×30 0.93	
1000	22×30 0.85				22×40 1.06	25.4×30 1.04				25.4×45 1.21	30×35 1.19	35×30 1.22
1500	22×40 1.16	25.4×30 1.14			22×50 1.42	25.4×40 1.42	30×30 1.39				30×45 1.60	35×40 1.65
2200	22×50 1.54	25.4×40 1.54	30×30 1.50				30×40 1.86	35×35 1.91				35×50 2.16
3300			30×40 2.04	35×35				35×40 2.45				
4700				35×40 2.61								

WV μF / ØD	80				100				160			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
150									22×30 0.37			
220					22×30 0.48				22×40 0.50	25.4×30 0.49		
330	22×30 0.59				22×40 0.66	25.4×30 0.65			22×50 0.67	25.4×40 0.67	30×30 0.65	
470	22×40 0.79	25.4×35 0.82			22×50 0.86	25.4×40 0.86	30×35 0.89			25.4×50 0.87	30×40 0.86	35×30 0.84
680		25.4×40 1.04	30×35 1.07				30×40 1.12	35×30 1.09			30×50 1.12	35×40 1.11
1000			30×45 1.42	35×35 1.40				35×40 1.46				35×50 1.46
1500				35×45 1.86								

WV μF / ØD	200				250			
	22	25.4	30	35	22	25.4	30	35
100					22×30 0.32			
150	22×35 0.42				22×40 0.44	25.4×30 0.43		
220	22×45 0.56	25.4×40 0.58	30×30 0.57		22×50 0.58	25.4×40 0.58	30×35 0.60	35×30 0.61
330		25.4×50 0.77	30×40 0.77	35×30 0.75			30×45 0.80	35×35 0.79
470			30×50 0.99	35×40 0.98				35×45 1.03
680				35×50 1.28				

← Case size ØD×L (mm)  
← Ripple current (A rms) at 125°C, 120Hz