

# LARGE ALUMINUM ELECTROLYTIC CAPACITORS

## HG High Ripple Series

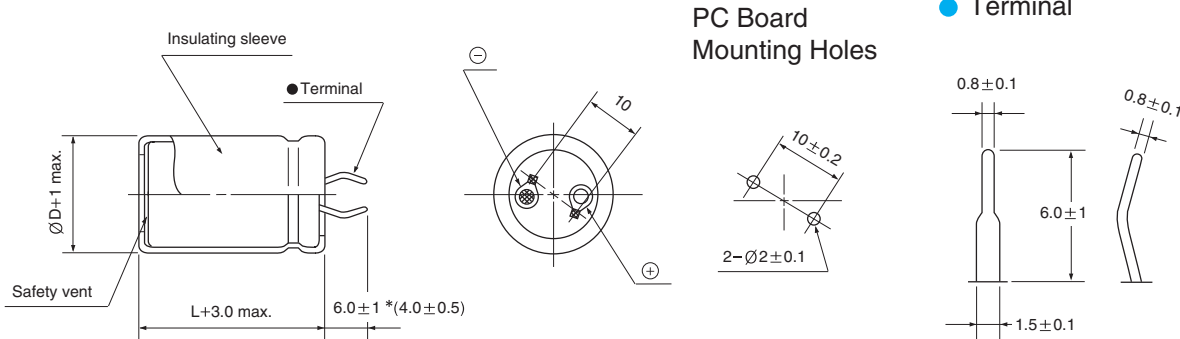
- High ripple current compared with HK series
- Load life of 3000 hours at 105°C
- Complied to the RoHS directive



Item	Characteristics							
Operating temperature range	WV < 350 : -40 ~ +105°C, WV ≥ 350 : -25 ~ +105°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 : tanδ increases by 0.01 for each 1000µF from below value.							
	<table border="1"> <thead> <tr> <th>WV</th> <th>250</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table>	WV	250	400	450	tanδ	0.15	0.15
WV	250	400	450					
tanδ	0.15	0.15	0.20					
Load life (after application of the rated voltage for 3000 hours at 105°C)	Leakage current	Less than specified value						
	Capacitance change	Within ±20% of initial value						
	tanδ	Less than 200% of specified value						
Shelf life (at 105°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



\* 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.

### DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV µF	250				400				450			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
150									22 × 35 1.10	25.4 × 30 1.10		
180	22 × 20 0.88	25.4 × 20 0.89			22 × 35 1.26	25.4 × 25 1.25	30 × 20 1.29		22 × 40 1.32	25.4 × 35 1.32	30 × 25 1.29	35 × 25 1.32
220	22 × 25 0.93	25.4 × 20 1.06			22 × 40 1.46	25.4 × 30 1.47	30 × 25 1.43			25.4 × 35 1.52	30 × 30 1.50	35 × 25 1.46
330	22 × 30 1.35	25.4 × 25 1.39	30 × 20 1.43			25.4 × 40 1.95	30 × 30 1.93	35 × 25 1.89			30 × 35 2.03	35 × 30 2.20
470	22 × 40 1.78	25.4 × 30 1.74	30 × 25 1.80				30 × 40 2.20	35 × 30 2.48				35 × 40 2.59
560	22 × 45 2.02	25.4 × 35 2.01	30 × 25 1.98	35 × 25 2.01				35 × 35 2.82				35 × 45 2.93
680		25.4 × 40 2.43	30 × 30 2.29	35 × 25 2.34	← Case size ØD × L (mm)			35 × 40 3.24				35 × 50 3.43

↑ Ripple current (Arms) at 105°C, 120Hz

### FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ≤
250		0.85	1.00	1.20	1.25	1.45
400, 450		0.85	1.00	1.15	1.20	1.40