

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

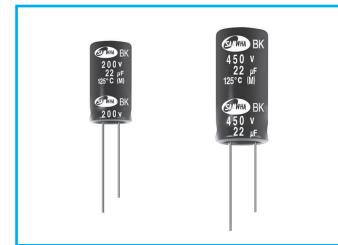
**Upgrade**



For PSU, High Temperature  
Series

- High reliability withstanding 5000 hours load life at 125°C
- Suitable for compact energy saving lamp
- Complied to the RoHS directive

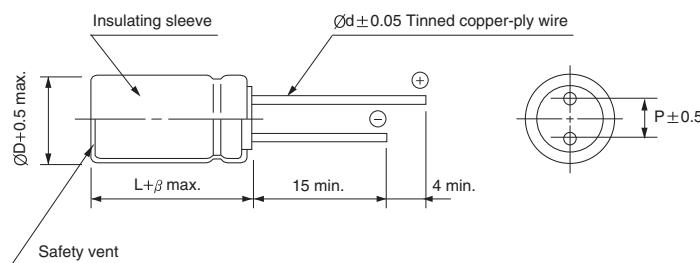
RH → BK  
High Temp.



Item	Characteristics												
Operating temperature range	-25 ~ +125°C												
Leakage current max.	$I = 0.03CV + 15\mu A$ ( $CV \leq 1000$ ), $I = 0.02CV + 25\mu A$ ( $CV > 1000$ ) (after 5 minutes)												
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C												
Dissipation factor max. (at 120Hz, 20°C)	Rated Voltage(V)	160	200	250	350	400	450						
	$\tan\delta$	0.15	0.15	0.15	0.20	0.24	0.24						
Low temperature characteristics (Impedance ratio at 120Hz)	WV	160	200	250	350	400	450						
	Z-25°C/Z+20°C	3	3	3	6	6	6						
Load life	After an application of DC bias voltage plus the rated AC ripple current for 5000 hours at 125°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage.												
	Leakage current	Less than specified value											
	Capacitance change	Within $\pm 20\%$ of initial value											
	$\tan\delta$	Less than 200% of specified value											
450WV products are for 2000 hours.													
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



ØD	10	12.5	16
P	5.0	5.0	7.5
Ød	0.6	0.6	0.8
β	2.0		

## DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F$ \ WV	160		200		250		350		400		450						
2.2							10 × 12.5	135	10 × 12.5	135							
3.3							10 × 12.5	135	10 × 16	180	10 × 16	150					
4.7	10 × 12.5	135	10 × 12.5	150	10 × 12.5	150	10 × 16	195	10 × 20	255	10 × 25	156					
					10 × 16	180	10 × 20	255									
10	10 × 12.5	165	10 × 12.5	195	10 × 16	210	12.5 × 20	375	12.5 × 20	375	12.5 × 20	232					
	10 × 16	210	10 × 16	240	10 × 20	255											
22	10 × 20	420	10 × 20	420	12.5 × 20	450	Ripple current (mA rms) at 125°C, 100kHz										
33	12.5 × 20	600	12.5 × 20	600	12.5 × 25	675	Case size ØD × L (mm)										
47	12.5 × 25	780	12.5 × 25	780							16 × 25	415					
											16 × 31.5	548					

## FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	60Hz	120Hz	1kHz	10kHz	50kHz	100kHz
Coefficient	0.30	0.40	0.70	0.90	0.95	1.00