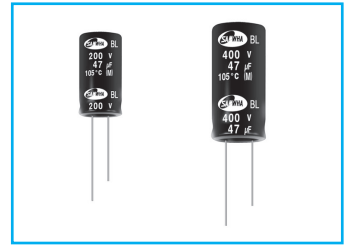


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**BL** For PSU, High Ripple Current, Long Life Series

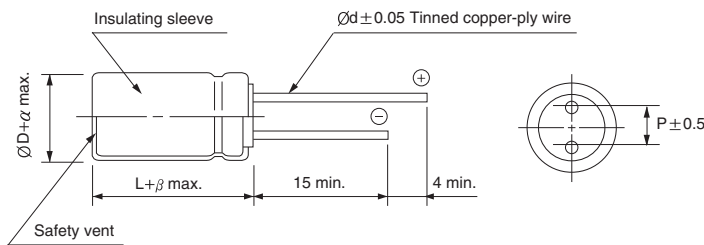
- High ripple current
- Operating temperature range of -40 ~ +105°C
- For power supply and adapter
- Complied to the RoHS directive



Item	Characteristics									
Operating temperature range	-40 ~ +105°C (160 ~ 450WV), -25 ~ +105°C (500WV)									
Leakage current max.	$I = 0.02CV + 25\mu A$ (after 5 minutes)									
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C									
Dissipation factor max. (at 120Hz, 20°C)	WV	160	200	250	350	400	420	450	500	
	$\tan\delta$	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.24	
Low temperature characteristics (Impedance ratio at 120Hz)	WV	160	200	250	350	400	420	450	500	
	Z-25°C/Z+20°C	3	3	3	4	6	6	6	6	
	Z-40°C/Z+20°C	4	4	4	6	6	6	6	-	
Load life	After an application of DC bias voltage plus the rated AC ripple current for 10000 hours at 105°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								
Shelf life (at 105°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	8	10	12.5	16	18	20
P	3.5	5.0	5.0	7.5	7.5	10.0
Ød	0.6	0.6	0.6	0.8	0.8	0.8
α	0.5					1.0
β	1.5	2.0				3.0

## ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	60Hz	120Hz	1kHz	10kHz	50kHz	100kHz ≤
Coefficient	0.35	0.50	0.80	0.90	0.95	1.00

## BL series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu\text{F}$ \diagdown WV	160		200		250		350	
4.7					8 × 11.5	193		
6.8					8 × 11.5	220	10 × 16	264
					10 × 12.5	230		
10	10 × 16	320	10 × 16	320	10 × 16	320	8 × 20	315
							10 × 20	340
22	10 × 16	500	10 × 16	500	10 × 20	500	12.5 × 20	424
33	10 × 20	650	10 × 20	650	12.5 × 20	770	16 × 20	605
47	10 × 20	750	12.5 × 20	840	12.5 × 20	980	16 × 25	800
68	12.5 × 20	970	12.5 × 25	970	16 × 20	1080	18 × 25	1020
82	12.5 × 25	1250	16 × 20	1125			18 × 31.5	1090
					16 × 20	1190		
100	12.5 × 25	1250	16 × 20	1230	18 × 25	1425		
150	16 × 25	1610	18 × 25	1740	18 × 25	2000		

$\mu\text{F}$ \diagdown WV	400		420		450		500	
1	8 × 11.5	72			8 × 11.5	100		
2.2	8 × 11.5	99			8 × 11.5	110		
3.3	8 × 11.5	160			8 × 11.5	160		
3.9	8 × 11.5	170			8 × 15	180		
4.7	8 × 15	175			8 × 20	240		
	10 × 12.5	230			10 × 16	240		
6.8	8 × 20	230			10 × 16	265		
	10 × 16	265						
10	10 × 20	340	10 × 20	360	10 × 20	385	12.5 × 25	385
15					10 × 20	385		
22	12.5 × 25	520	12.5 × 25	520	12.5 × 20	485	16 × 25	675
					12.5 × 25	485	16 × 31.5	820
			16 × 20	520	16 × 25	675		
33	16 × 25	775	16 × 25	825	18 × 25	845	18 × 35.5	870
47	18 × 25	1020	18 × 31.5	1015	18 × 31.5	1060	18 × 35.5	1000
68	18 × 31.5	1050	18 × 25	1090	18 × 25	1200	18 × 35.5	1200
			18 × 31.5	1125	18 × 31.5	1200	18 × 40	1300
82	18 × 35.5	1150	18 × 31.5	1210	18 × 35.5	1270	16 × 50	1350
100	18 × 40	1210	18 × 35.5	1270	18 × 35.5	1330		
			18 × 40	1330	18 × 40	1400		
120					18 × 40	1450		
150					20 × 41	1550		

WV  
 Ripple current (mA rms) at 105°C, 100kHz  
 Case size  $\varnothing D \times L$  (mm)