

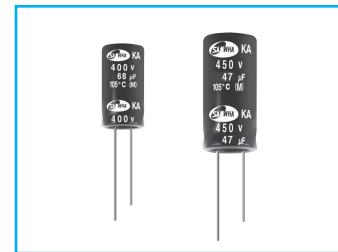
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



For PSU, High Ripple Current
Series

- High ripple current
- Operating temperature range of -40 ~ +105°C
- Complied to the RoHS directive

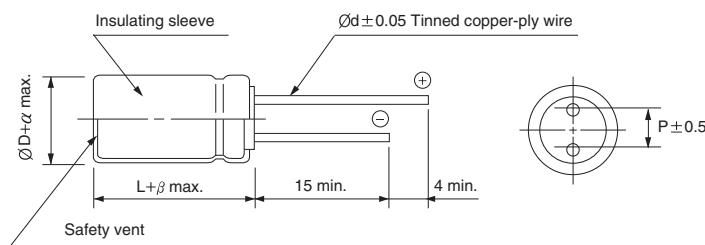
WL → KA
Long Life



Item	Characteristics		
Operating temperature range	WV	400 ~ 450	500
	Temperature range	-40 ~ +105°C	-25 ~ +105°C
Leakage current max.	$I = 0.02CV + 15\mu A$ (after 5 minutes)		
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C		
Dissipation factor max.	0.2max. at 120Hz, 20°C		
Low temperature characteristics (Impedance ratio at 120Hz)	WV	400 ~ 450	500
	Z-25°C/Z+20°C	6	8
	Z-40°C/Z+20°C	10	-
Load life	After an application of DC bias voltage plus the rated AC ripple current for 3000 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	10	12.5	16	18	20
P	5.0	5.0	7.5	7.5	10.0
Ød	0.6	0.6	0.8	0.8	0.8
α		0.5			1.0
β		2.0			3.0

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	120Hz	1kHz	10kHz	50kHz	100kHz ≤
~ 33	0.40	0.65	0.82	0.91	1.00
47 ~ 150	0.50	0.70	0.84	0.92	1.00

KA series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	400		420		450		500	
Item	$\varnothing D \times L(\text{mm})$	Ripple current (mA rms) 105°C, 100kHz	$\varnothing D \times L(\text{mm})$	Ripple current (mA rms) 105°C, 100kHz	$\varnothing D \times L(\text{mm})$	Ripple current (mA rms) 105°C, 100kHz	$\varnothing D \times L(\text{mm})$	Ripple current (mA rms) 105°C, 100kHz
3.3					10×20	150		
4.7					10×20	200		
10	10×16	176			10×20	230	12.5×20	240
	10×20	180						
22	12.5×25	300			12.5×25	525	12.5×30	420
							16×25	470
33	16×20	600			16×25	600	18×25	580
47	16×25	700	16×25	630	16×25	660	16×35.5	650
					16×31.5	720	18×31.5	650
					18×25	720	18×35.5	700
56			16×31.5	740	16×31.5	800	16×40	740
			18×25		18×25	800		
68	16×31.5	1100	16×31.5	810	16×31.5	900	16×45	820
							18×40	900
82	16×35.5	1150	16×40	960	16×40	1115	16×50	1000
			18×31.5	960	18×31.5	1115	18×40	1000
100	18×35.5	1200	16×40	1100	16×40	1200	16×50	1250
			18×35.5	1100	18×35.5	1200	18×45	1250
							20×41	1250
120	18×40	1270	16×50	1250	16×50	1500	20×41	1370
			18×40	1250	18×40	1500		
150	20×41	1380			20×41	1600		