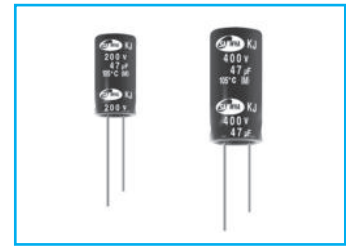


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

KJ For PSU, High Ripple, Long Life Series

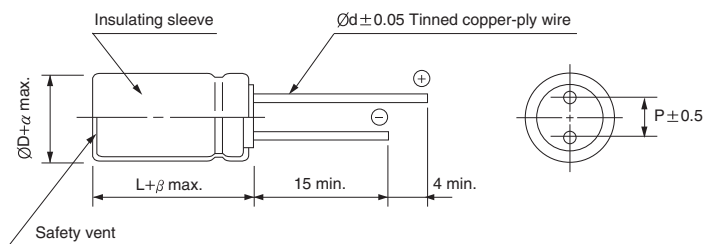
- High reliability withstanding 12000 hours load life at 105°C
- Suitable for CFL, adapter and power supply
- Complied to the RoHS directive



Item	Characteristics																											
Operating temperature range	-40 ~ +105°C (160 ~ 450WV), -25 ~ +105°C (500WV)																											
Leakage current max.	I = 0.04CV + 100 μ A (after 1 minutes) I = 0.02CV + 25 μ A (after 5 minutes)																											
Capacitance tolerance	\pm 20% at 120Hz, 20°C																											
Dissipation factor max. (at 120Hz, 20°C)	<table border="1"> <tr> <td>WV</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>420</td> <td>450</td> <td>500</td> </tr> <tr> <td>tanδ</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> </tr> </table>	WV	160	200	250	350	400	420	450	500	tan δ	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.24									
WV	160	200	250	350	400	420	450	500																				
tan δ	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.24																				
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>WV</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>420</td> <td>450</td> <td>500</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>-</td> </tr> </table>	WV	160	200	250	350	400	420	450	500	Z-25°C/Z+20°C	3	3	3	6	6	6	6	6	Z-40°C/Z+20°C	4	4	4	6	6	6	6	-
WV	160	200	250	350	400	420	450	500																				
Z-25°C/Z+20°C	3	3	3	6	6	6	6	6																				
Z-40°C/Z+20°C	4	4	4	6	6	6	6	-																				
Load life	<p>After an application of DC bias voltage plus the rated AC ripple current for 12000 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.</p> <table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within \pm20% of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than 200% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within \pm 20% of initial value	tan δ	Less than 200% of specified value																					
Leakage current	Less than specified value																											
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tan δ	Less than 200% of specified value																											
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tan δ 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

WV	Frequency μ F	120Hz	300Hz	1kHz	10kHz	50kHz	100kHz \leq
160~450	~ 15	0.30	0.50	0.60	0.90	0.95	1.00
	22 ~ 47	0.40	0.50	0.70	0.90	0.95	1.00
	68 ~	0.50	0.60	0.80	0.90	0.95	1.00
500	~ 39	0.40	0.50	0.70	0.90	0.95	1.00
	47 ~	0.50	0.60	0.80	0.90	0.95	1.00

KJ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown WV	160		200		250		350	
4.7					8 × 11.5	193	10 × 12.5	198
6.8					8 × 11.5	220	10 × 16	308
					10 × 12.5	319		
10	10 × 16	358	10 × 16	407	8 × 15	292	8 × 20	424
					10 × 16	407	10 × 20	462
22	10 × 16	572	10 × 20	638	10 × 20	580	12.5 × 20	743
27	10 × 16	611	10 × 20	638	10 × 20	660	12.5 × 20	784
33	10 × 16	690	10 × 20	825	12.5 × 20	853	16 × 20	858
39	10 × 20	759	12.5 × 20	839	12.5 × 20	886	16 × 20	880
47	10 × 20	924	12.5 × 20	1100	12.5 × 20	1100	16 × 25	1130
68	12.5 × 20	924	12.5 × 25	1188	16 × 20	1210	18 × 25	1220
			16 × 20	1210				
82	12.5 × 25	1040	16 × 25	1232	16 × 20	1340	18 × 25	1380
100	12.5 × 25	1210	16 × 25	1434	16 × 25	1540	18 × 31.5	1617
	16 × 20				18 × 20			
120	16 × 25	1325	16 × 25	1571	18 × 25	1645	18 × 35.5	1848
150	16 × 25	1645	18 × 25	1727	18 × 25	1914	18 × 40	2072
180	16 × 25	1782	18 × 25	1760	18 × 31.5	2024	20 × 41	2310
220	18 × 25	2090	18 × 31.5	2222	18 × 35.5	2200		
270	16 × 35.5	2200	18 × 35.5	2530				
330	16 × 40	2508	18 × 40	2750				
470	18 × 45	3084						

μF \diagdown WV	400		420		450		500	
1	8 × 11.5	72			8 × 11.5	90		
2.2	8 × 11.5	99			8 × 11.5	105		
3.3	8 × 11.5	160			8 × 11.5	145		
3.9	8 × 11.5	171			8 × 15	165		
4.7	8 × 15	176			8 × 20	242		
	10 × 12.5	242			10 × 12.5	242		
6.8	8 × 20	231			10 × 16	363		
	10 × 16	308			10 × 20	440		
10	10 × 20	462	10 × 20	462	10 × 20	440	12.5 × 20	413
					12.5 × 20	528		
15	12.5 × 20	528	12.5 × 20	528	12.5 × 20	528	12.5 × 25	440
					12.5 × 25	660		
22	12.5 × 25	792	12.5 × 25	745	12.5 × 25	890	16 × 20	500
			16 × 20	780	16 × 20	900	16 × 25	675
27	16 × 20	803	16 × 20	875	16 × 20	950	16 × 25	823
33	16 × 20	960	12.5 × 30	980	16 × 25	1095	16 × 31.5	880
			16 × 25	1035	18 × 20		18 × 25	
39	16 × 20	1000	16 × 25	1050	16 × 25	1100	16 × 31.5	1033
47	16 × 25	1188	16 × 25	1125	18 × 25	1150	18 × 25	1000
	18 × 20						18 × 31.5	1033
68	16 × 31.5	1309	18 × 25	1265	18 × 31.5	1180	18 × 35.5	1100
							18 × 40	1200
82	18 × 31.5	1639	18 × 31.5	1450	18 × 35.5	1430	18 × 35.5	1250
							18 × 40	1340
100	18 × 35.5	1810	18 × 35.5	1700	18 × 35.5	1740	18 × 45	1400
					18 × 40	1740	20 × 41	1600
120	18 × 40	2006	18 × 40	1700	18 × 45	1740		
150	20 × 41	2244	20 × 41	2000				

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

MINIATURE TYPES