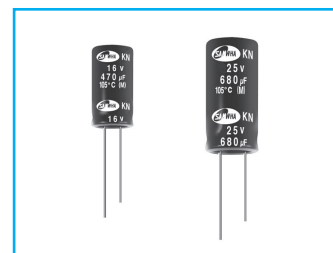


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



High Ripple Current,
Ultra Low Impedance Series

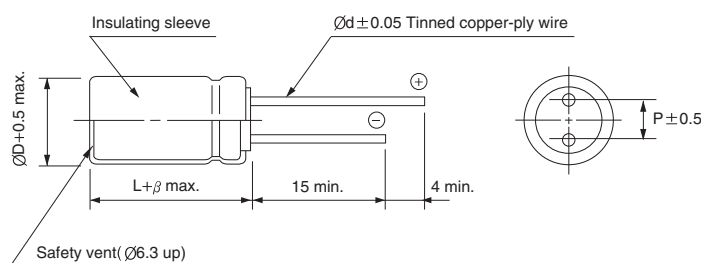


- Enabled high ripple current by a reduction of impedance at high frequency range
- High reliability withstanding 5000 hours load life at 105°C
(3000 hours for smaller case sizes as specified below)
- Complied to the RoHS directive

Item	Characteristics				
Operating temperature range	-40 ~ +105°C				
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 minutes) I = 0.03CV or 4μA whichever is greater (after 1 minute)				
Capacitance tolerance	±20% at 120Hz, 20°C				
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF : tanδ increases by 0.02 for each 1000μF from below value.				
	WV	10	16	25	35
	tanδ	0.19	0.16	0.14	0.12
Low temperature characteristics (Impedance ratio at 120Hz)	Z-40°C / Z+20°C		Z-25°C / Z+20°C		
	3		2		
Load life (after application of the rated voltage for 5000 hours at 105°C)	Leakage current		Less than specified value		
	Capacitance change		Within ±25% of initial value		
	tanδ		Less than 200% of specified value		
	ØD		ØD = 8		ØD = 10
	Life time		3000 hours		5000 hours
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



ØD	5	6.3	8	10	12.5
P	2.0	2.5	3.5	5.0	5.0
Ød	0.5	0.5	0.6	0.6	0.6
β	1.5			2.0	

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency µF	120Hz	1kHz	10kHz	50kHz	100kHz ≤
~ 270	0.50	0.73	0.92	0.96	1.00
330 ~ 680	0.55	0.77	0.94	0.97	1.00
820 ~ 1800	0.60	0.80	0.96	0.98	1.00
2200	0.70	0.85	0.98	0.99	1.00

KN series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	10			16		
	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
56				5 × 11	0.150	405
100	5 × 11	0.150	405			
120				6.3 × 11	0.065	760
220	6.3 × 11	0.065	760			
330				8 × 11.5	0.036	1000
470	8 × 11.5	0.036	1000	8 × 15	0.028	1260
				10 × 12.5	0.027	1430
680	8 × 15	0.028	1250	8 × 20	0.020	1655
	10 × 12.5	0.027	1449	10 × 16	0.020	1820
1000	8 × 20	0.020	1895	10 × 20	0.014	2180
	10 × 16	0.020	1958	12.5 × 16	0.018	2215
1200	10 × 20	0.014	2180	10 × 25	0.013	2360
	12.5 × 16	0.018	2200			
1500	10 × 25	0.013	2360	12.5 × 20	0.013	2820
2200	12.5 × 20	0.013	2945	12.5 × 25	0.012	3095
3300	12.5 × 25	0.012	3234			

WV Item μF	25			35		
	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	ØD×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
33				5 × 11	0.150	405
47	5 × 11	0.150	405			
56				6.3 × 11	0.065	760
100	6.3 × 11	0.065	760			
150				8 × 11.5	0.036	1000
220	8 × 11.5	0.036	1255	8 × 15	0.028	1559
				10 × 12.5	0.027	1430
270				8 × 20	0.020	2255
330	8 × 15	0.028	1640	10 × 16	0.020	2409
	10 × 12.5	0.027	1640			
470	8 × 20	0.020	1695	10 × 20	0.014	2805
	10 × 16	0.020	1820	12.5 × 16	0.018	2805
560				10 × 25	0.013	2880
680	10 × 20	0.014	2200	12.5 × 20	0.013	3150
	12.5 × 16	0.018	2200			
820	10 × 25	0.013	2805			
1000	12.5 × 20	0.013	3080	12.5 × 25	0.012	3300
1500	12.5 × 25	0.012	3100			