

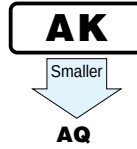
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

AK
series

Snap-in Terminal Type, Permissible Abnormal Voltage,
Wide Temperature Range

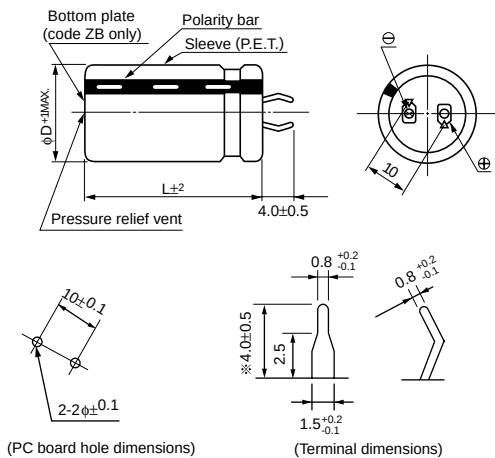
- Withstanding 2000 hours application of rated ripple current at 105°C.
- Extended voltage range at 200V, 400V and 420V.
- Improved safety features for abnormally excessive voltage.
- Ideally suited for the equipment used at voltage fluctuating area.
- Adapted to the RoHS directive (2002/95/EC).



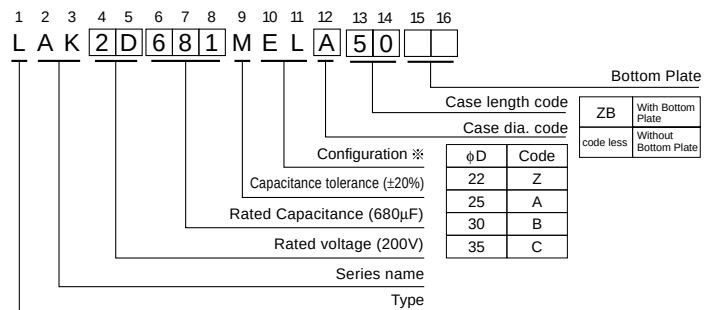
Specifications

Item	Performance Characteristics				
Category Temperature Range	- 25 ~ +105°C				
Rated Voltage Range	200・400・420V				
Rated Capacitance Range	33 ~ 1200μF				
Capacitance Tolerance	±20% at 120Hz, 20°C				
Leakage Current	$I \leq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)]				
tan δ	0.20MAX. 120Hz 20°C				
Stability at Low Temperature	Rated voltage(V)		200	400・420	Measurement frequency : 120Hz
	Impedance ratio	Z - 25°C/Z+20°C	8	8	
Endurance	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified ripple current) for 2000 hours at 105°C, capacitors meet the characteristic requirements listed at right.			Capacitance change	Within ±20% of initial value
				tan δ	200% or less of initial specified value
				Leakage current	Initial specified value or less
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the requirements listed at right.			Capacitance change	Within ±15% of initial value
				tan δ	150% or less of initial specified value
				Leakage current	Initial specified value or less
Safety Performance	The pressure relief vent will operate in normal conditions, with no dangerous conditions such as flames, ignitions or dispersion of pieces of the capacitor and/or case.				
	rating			test conditions	
	Voltage (V)	Capacitance (μF)		Limited DC current	Test voltage
	200	C < 330		4 A	300VDC and 375VDC
		330 ≦ C < 470		5 A	
		470 ≦ C		7 A	
	400	C < 100		2 A	500VDC and 600VDC
		100 ≦ C < 220		4 A	
		220 ≦ C		7 A	
	420	C < 100		2 A	520VDC and 630VDC
		100 ≦ C < 220		4 A	
		220 ≦ C		7 A	
Marking	Printed with white color letter on black sleeve				

Drawing



Type numbering system (Example : 200V 680μF)



※ Please contact to us if other configurations are required.

Minimum order quantity : 50pcs.

- Dimension table in next page.

CAT.8100U

■ Dimensions

φD×L (mm)

V(Code) Cap.(μF) Code		200V (2D)				400V (2G)				420V (W6)			
		22	25	30	35	22	25	30	35	22	25	30	35
33	330					22×20 0.22				22×25 0.25			
39	390					22×20 0.30							
47	470	22×20 0.35				22×25 0.35	25×20 0.35	30×20 0.40		22×25 0.35			
56	560					22×25 0.38	25×20 0.38			22×25 0.38			
68	680					22×25 0.40	25×25 0.45	30×20 0.50		22×30 0.45	25×25 0.45		
82	820					22×30 0.50	25×25 0.50	30×20 0.50		22×35 0.64	25×30 0.64		
100	101	22×20 0.50				22×35 0.55	25×30 0.53	30×25 0.53	35×20 0.55	22×40 0.69	25×30 0.69	30×25 0.69	
120	121					22×40 0.60	25×30 0.60	30×25 0.60		22×45 0.75	25×35 0.75	30×30 0.75	35×25 0.75
150	151		25×20 0.65			22×45 0.70	25×35 0.70	30×30 0.70	35×25 0.70		25×40 0.82	30×30 0.82	35×25 0.82
180	181	22×25 0.70		30×20 0.70		22×50 0.80	25×40 0.80	30×30 0.80	35×25 0.80		25×45 0.90	30×35 0.90	35×30 0.90
220	221	22×25 0.74					25×45 0.90	30×35 0.90	35×30 0.90			30×40 1.00	35×35 1.00
270	271	22×30 0.90	25×25 0.85		35×20 1.10			30×40 0.98	35×35 0.96			30×45 1.10	35×40 1.10
330	331	22×30 1.05	25×30 1.05	30×25 1.05				30×50 1.21	35×40 1.21				35×45 1.20
390	391	22×35 1.20	25×30 1.20	30×25 1.20					35×45 1.32				
470	471	22×40 1.30	25×35 1.30	30×25 1.35					35×50 1.45				
560	561	22×45 1.50	25×40 1.50	30×35 1.55	35×25 1.55								
680	681		25×50 1.70	30×40 1.70	35×30 1.70								
820	821			30×45 1.99	35×35 1.99								
1000	102			30×50 2.10	35×40 2.10								
1200	122				35×50 2.30								Case size Rated ripple

Rated Ripple (A rms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)		50	60	120	1k	10k~
Coefficient	200V	0.85	0.88	1.00	1.15	1.20
	400-420V	0.88	0.90	1.00	1.10	1.15