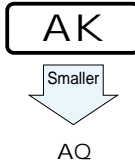


ALUMINUM ELECTROLYTIC CAPACITORS

AK series Snap-in Terminal Type, 105°C Permissible Abnormal Voltage

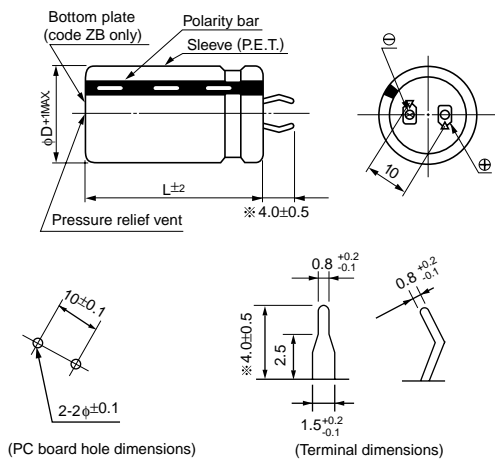
- Withstanding 2000 hours application of rated ripple current at 105°C.
- Extended voltage range at 200V, 400V and 420V.
- Improved safety features for abnormally excessive voltage.
- Ideally suited for the equipment used at voltage fluctuating area.
- Adapted to the RoHS directive (2002/95/EC).



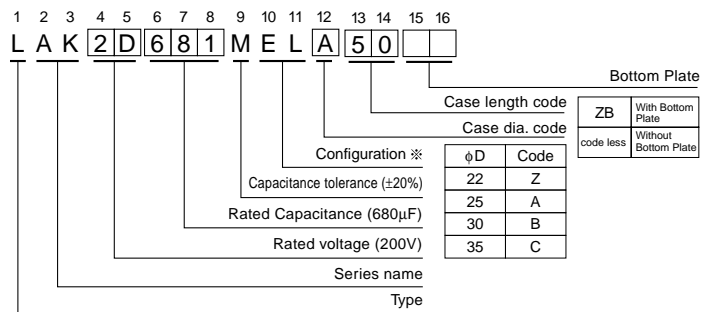
Specifications

Item	Performance Characteristics				
Category Temperature Range	- 25 to +105°C				
Rated Voltage Range	200 · 400 · 420V				
Rated Capacitance Range	33 to 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)]				
Tangent of loss angle (tan δ)	0.20MAX. 120Hz 20°C				
Stability at Low Temperature	Rated voltage(V)		200	400 · 420	
	Impedance ratio (MAX)	Z - 25°C/Z+20°C	8	8	
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage.			Measurement frequency : 120Hz	
				Capacitance change	Within ±20% of initial value
				tan δ	200% or less of initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.			Leakage current	Less than or equal to the initial specified value
				Capacitance change	Within ±15% of initial value
				tan δ	150% or less of initial specified value
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.

■Dimensions

Cap. (μF)	V(Code) Code	φD	200V (2D)				400V (2G)				420V (W6)									
			22	25	30	35	22	25	30	35	22	25	30	35						
33	330																			
39	390																			
47	470		22×20																	
			0.35																	
56	560																			
68	680																			
82	820																			
100	101		22×20																	
			0.50																	
120	121																			
150	151			25×20																
				0.65																
180	181		22×25		30×20															
			0.70		0.70															
220	221		22×25																	
			0.74																	
270	271		22×30	25×25		35×20														
			0.90	0.85		1.10														
330	331		22×30	25×30	30×25															
			1.05	1.05	1.05															
390	391		22×35	25×30	30×25															
			1.20	1.20	1.20															
470	471		22×40	25×35	30×25															
			1.30	1.30	1.35															
560	561		22×45	25×40	30×35	35×25														
			1.50	1.50	1.55	1.55														
680	681			25×50	30×40	35×30														
				1.70	1.70	1.70														
820	821				30×45	35×35														
					1.99	1.99														
1000	102				30×50	35×40														
					2.10	2.10														
1200	122					35×50														
						2.30														
													Case size φD×L (mm)							
													Rated ripple							

Rated Ripple (Arms) at 105°C 120Hz

●Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	1k	10k or more
200V	0.85	0.88	1.00	1.15	1.20
400・420V	0.88	0.90	1.00	1.10	1.15