

ALUMINUM ELECTROLYTIC CAPACITORS

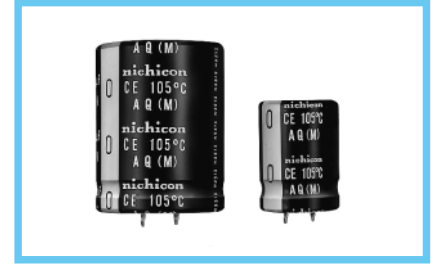
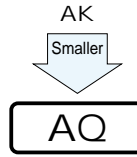


AQ

Snap-in Terminal Type, Permissible Abnormal Voltage, Smaller-sized, Wide Temperature Range (692 type) series



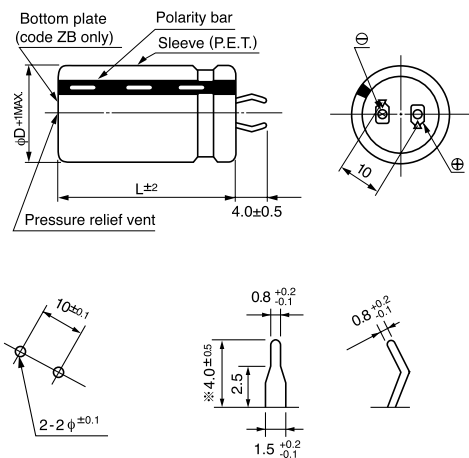
- Withstanding 2000 hours application of rated ripple current of 105°C.
- Extended voltage range at 200V, 220V and 400V.
- Smaller case sizes and higher ripple current than AK series.
- Improved safety features for abnormally excessive voltage.
- Ideally suited for the equipment used at voltage fluctuating area.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

Item	Performance Characteristics			
Category Temperature Range	-25 ~ +105°C			
Rated Voltage Range	200 · 220 · 400V			
Rated Capacitance Range	33 ~ 1500μF			
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 · 220	400	Measurement frequency : 120Hz
	Impedance ratio (MAX) 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 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.	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)	Rated Capacitance (μF)	Limited DC current	Test voltage
	200	C < 330	4 A	300VDC and 375VDC
		330 ≤ C < 470	5 A	
		470 ≤ C	7 A	
220	C < 330	4 A	320VDC and 405VDC	
	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		
Marking	Printed with white color letter on black sleeve			

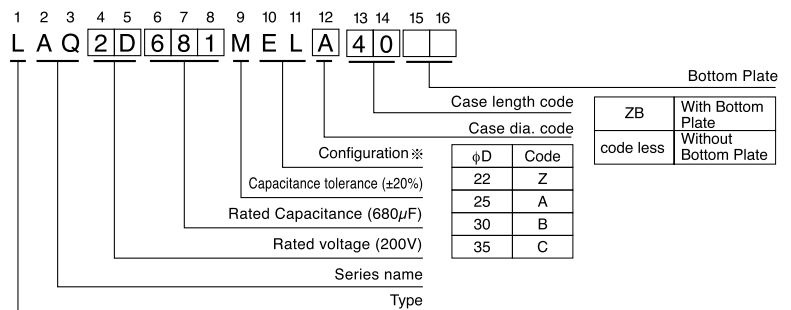
Drawing



(PC board hole dimensions)

(Terminal dimensions)

Type numbering system (Example : 200V 680μF)



* Please contact to us if other configurations are required.

Minimum order quantity : 50pcs.

- Dimension table in next page.

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AQ series

■ Dimensions

Cap.(μF)	Code	V(Code)	φD	200V (2D)				220V (2P)				400V (2G)				
				22	25	30	35	22	25	30	35	22	25	30	35	
33	330												22×25			
													0.25			
39	390												22×25			
													0.30			
47	470												22×25			
													0.35			
56	560												22×25			
													0.45			
68	680												22×25			
													0.51			
82	820												22×30	25×25		
													0.58	0.58		
100	101							22×20					22×30	25×25		
								0.50					0.66	0.66		
120	121							22×25					22×35	25×30	30×25	
								0.60					0.76	0.76	0.76	
150	151							22×25	25×20				22×40	25×35	30×25	
								0.65	0.65				0.85	0.85	0.85	
180	181							22×25	25×25				25×40	30×30	35×25	
								0.70	0.70				0.95	0.95	0.95	
220	221							22×30	25×25	30×20			25×45	30×35	35×30	
								0.90	0.90	0.90			1.24	1.24	1.24	
270	271							22×35	25×30	30×25	35×20			30×40	35×35	
								1.00	1.00	1.00	1.00			1.30	1.30	
330	331							22×30	25×30	30×25	35×25			30×45	35×35	
								1.20	1.20	1.20	1.20			1.47	1.47	
390	391							22×35	25×30	30×30	35×25				35×40	
								1.35	1.35	1.35	1.35				1.59	
470	471							22×40	25×30	30×30	35×25				35×45	
								1.45	1.45	1.45	1.45				1.87	
560	561							22×45	25×35	30×30	35×30					
								1.60	1.60	1.60	1.60					
680	681							22×50	25×40	30×30	35×25					
								1.75	1.75	1.75	1.75					
820	821							25×50	30×35	35×30						
								2.11	2.11	2.11						
1000	102							30×45	35×35							
								2.40	2.40							
1200	122							30×50	35×40							
								2.65	2.65							
1500	152							35×45								
								3.08								

Rated Ripple (Arms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	1k	10k~
Coefficient	0.85	0.88	1.00	1.15	1.20
	0.88	0.90	1.00	1.10	1.15