

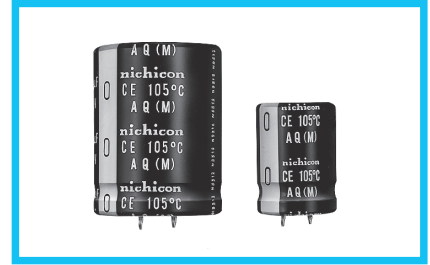
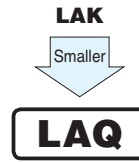
ALUMINUM ELECTROLYTIC CAPACITORS

LAQ

Snap-in Terminal Type, 105°C Permissible Abnormal Voltage, Smaller-sized



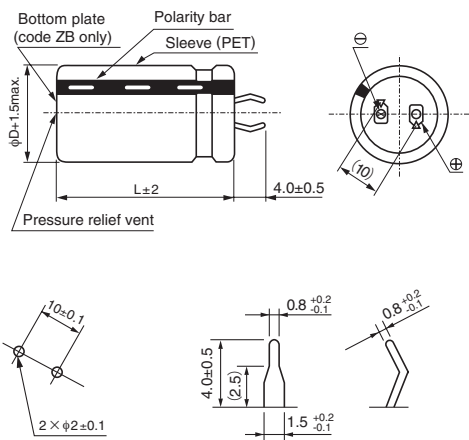
- Withstanding 2000 hours application of rated ripple current of 105°C.
- Extended voltage range at 200V, 220V and 400V.
- Smaller case sizes and higher ripple current than LAK.
- Improved safety features for abnormally excessive voltage.
- Ideally suited for the equipment used at voltage fluctuating area.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).



Specifications

Item	Performance Characteristics			
Category Temperature Range	-25 to +105°C			
Rated Voltage Range	200 • 220 • 400V			
Rated Capacitance Range	33 to 1500µF			
Capacitance Tolerance	±20% at 120Hz, 20°C			
Leakage Current	$I \leq 3 \cdot \sqrt{CV}$ (µA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (µF) V : Voltage (V)]			
Tangent of loss angle (tan δ)	0.20max. 120Hz at 20°C			
Stability at Low Temperature	Rated voltage (V)		Measurement frequency : 120Hz	
	Impedance ratio (max.)	$Z(-25^\circ\text{C}) / Z(+20^\circ\text{C})$		
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.		Capacitance change	
			tan δ	
			Leakage current	
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the requirements listed at right.		Capacitance change	
			tan δ	
			Leakage current	
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
		$330 \leq C < 470$	5 A	
		$470 \leq C$	7 A	
220	$C < 330$	4 A	320VDC and 405VDC	
	$330 \leq C < 470$	5 A		
	$470 \leq C$	7 A		
400	$C < 100$	2 A	500VDC and 600VDC	
	$100 \leq C < 220$	4 A		
	$220 \leq C$	7 A		
Marking	Printed with white color letter on black sleeve			

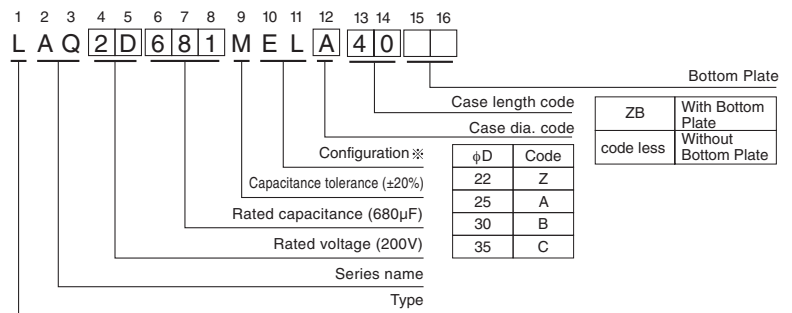
Drawing



(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.

LAQ

■ Dimensions

200V (2D)				
Cap. (μF)	Size φD × L(mm)	Ripple (mArms)	Leakage Current (mA)	Code
180	22 × 25	700	0.56	LAQ2D181MELZ25
	25 × 20	700	0.56	LAQ2D181MELA20
220	22 × 25	900	0.62	LAQ2D221MELZ25
270	22 × 25	1000	0.69	LAQ2D271MELZ25
330	22 × 30	1200	0.77	LAQ2D331MELZ30
	25 × 25	1200	0.77	LAQ2D331MELA25
390	22 × 35	1350	0.83	LAQ2D391MELZ35
	25 × 30	1350	0.83	LAQ2D391MELA30
470	22 × 40	1450	0.91	LAQ2D471MELZ40
	25 × 30	1450	0.91	LAQ2D471MELA30
	30 × 25	1450	0.91	LAQ2D471MELB25
560	22 × 45	1600	1.00	LAQ2D561MELZ45
	25 × 35	1600	1.00	LAQ2D561MELA35
	30 × 30	1600	1.00	LAQ2D561MELB30
680	22 × 50	1750	1.10	LAQ2D681MELZ50
	25 × 40	1750	1.10	LAQ2D681MELA40
	30 × 30	1750	1.10	LAQ2D681MELB30
	35 × 25	1750	1.10	LAQ2D681MELC25
820	25 × 50	2110	1.21	LAQ2D821MELA50
	30 × 35	2110	1.21	LAQ2D821MELB35
	35 × 30	2110	1.21	LAQ2D821MELC30
1000	30 × 45	2400	1.34	LAQ2D102MELB45
	35 × 35	2400	1.34	LAQ2D102MELC35
1200	30 × 50	2650	1.46	LAQ2D122MELB50
	35 × 40	2650	1.46	LAQ2D122MELC40
1500	35 × 45	3080	1.64	LAQ2D152MELC45

400V (2G)				
Cap. (μF)	Size φD × L(mm)	Ripple (mArms)	Leakage Current (mA)	Code
33	22 × 25	250	0.34	LAQ2G330MELZ25
39	22 × 25	300	0.37	LAQ2G390MELZ25
47	22 × 25	350	0.41	LAQ2G470MELZ25
56	22 × 25	450	0.44	LAQ2G560MELZ25
68	22 × 25	510	0.49	LAQ2G680MELZ25
82	22 × 30	580	0.54	LAQ2G820MELZ30
	25 × 25	580	0.54	LAQ2G820MELA25
100	22 × 30	660	0.60	LAQ2G101MELZ30
	25 × 25	660	0.60	LAQ2G101MELA25
120	22 × 35	760	0.65	LAQ2G121MELZ35
	25 × 30	760	0.65	LAQ2G121MELA30
	30 × 25	760	0.65	LAQ2G121MELB25
150	22 × 40	850	0.73	LAQ2G151MELZ40
	25 × 35	850	0.73	LAQ2G151MELA35
	30 × 25	850	0.73	LAQ2G151MELB25
180	25 × 40	950	0.80	LAQ2G181MELA40
	30 × 30	950	0.80	LAQ2G181MELB30
	35 × 25	950	0.80	LAQ2G181MELC25
220	25 × 45	1240	0.88	LAQ2G221MELA45
	30 × 35	1240	0.88	LAQ2G221MELB35
	35 × 30	1240	0.88	LAQ2G221MELC30
270	30 × 40	1300	0.98	LAQ2G271MELB40
	35 × 35	1300	0.98	LAQ2G271MELC35
330	30 × 45	1470	1.08	LAQ2G331MELB45
	35 × 35	1470	1.08	LAQ2G331MELC35
390	35 × 40	1590	1.18	LAQ2G391MELC40
470	35 × 45	1870	1.30	LAQ2G471MELC45

Rated ripple current (mArms) at 105°C 120Hz

220V (2P)				
Cap. (μF)	Size φD × L(mm)	Ripple (mArms)	Leakage Current (mA)	Code
100	22 × 20	500	0.44	LAQ2P101MELZ20
120	22 × 25	600	0.48	LAQ2P121MELZ25
150	22 × 25	650	0.54	LAQ2P151MELZ25
	25 × 20	650	0.54	LAQ2P151MELA20
180	22 × 25	700	0.59	LAQ2P181MELZ25
	25 × 25	700	0.59	LAQ2P181MELA25
220	22 × 30	900	0.66	LAQ2P221MELZ30
	25 × 25	900	0.66	LAQ2P221MELA25
	30 × 20	900	0.66	LAQ2P221MELB20
270	22 × 35	1000	0.73	LAQ2P271MELZ35
	25 × 30	1000	0.73	LAQ2P271MELA30
	30 × 25	1000	0.73	LAQ2P271MELB25
330	22 × 40	1200	0.80	LAQ2P331MELZ40
	25 × 30	1200	0.80	LAQ2P331MELA30
	30 × 25	1200	0.80	LAQ2P331MELB25
390	22 × 45	1350	0.87	LAQ2P391MELZ45
	25 × 35	1350	0.87	LAQ2P391MELA35
	30 × 30	1350	0.87	LAQ2P391MELB30
470	25 × 40	1450	0.96	LAQ2P471MELA40
	30 × 30	1450	0.96	LAQ2P471MELB30
	35 × 25	1450	0.96	LAQ2P471MELC25
560	25 × 45	1600	1.05	LAQ2P561MELA45
	30 × 35	1600	1.05	LAQ2P561MELB35
	35 × 30	1600	1.05	LAQ2P561MELC30
680	30 × 40	1750	1.16	LAQ2P681MELB40
	35 × 35	1750	1.16	LAQ2P681MELC35
820	30 × 45	2110	1.27	LAQ2P821MELB45
	35 × 40	2110	1.27	LAQ2P821MELC40
1000	35 × 45	2400	1.40	LAQ2P102MELC45

● Frequency coefficient of rated ripple current

Coefficient	Frequency (Hz)	50	60	120	1k	10k or more
	200-220V	400V	0.85	0.88	1.00	1.15
		0.88	0.90	1.00	1.10	1.15

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[LAQ2G331MELB45](#) [LAQ2G471MELC45](#) [LAQ2G820MELA25](#) [LAQ2G181MELC25](#) [LAQ2P391MELA35](#)
[LAQ2P271MELZ35](#) [LAQ2P221MELB20](#) [LAQ2P471MELB30](#) [LAQ2G271MELC35](#) [LAQ2D821MELA50](#)
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