

KL Conductive Polymer Aluminum Solid Capacitors

+105°C , Higher Ripple Current, Long Life , Series KL .

Features:

- 105°C、5000 hours assured
- Low ESR with Higher Ripple Current
- RoHS Compliance

Photo



Marking color: Blue

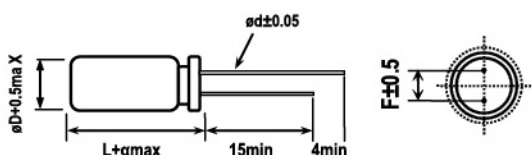
Applications

Suitable for long duration electronic device, computer motherboard, LED Driver, LED supply, etc

Specifications

No.	Item	Performance	
1	Temperature range (°C)	-55 to +105	
2	Leakage current (μA)	Less than 0.2CV or 280 whichever is larger (after two minutes) C: Rated Capacitance(μF); V: Rated voltage(V) 20°C	
3	Capacitance tolerance (%)	±20 (20°C,120Hz)	
4	Tangent of the loss angle (Tan δ)	0.10	20°C,120Hz
5	ESR	See Standard Ratings 20°C,100K-300KHz	
6	Temperature Characteristics, Impedance Ratio	At-55°C 100KHz(Low Temperature)	$Z_{-55^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$
		At +105°C 100KHz(High Temperature)	$Z_{+105^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$
7	Endurance (+105°C 5000hours Rated voltage Applied)	Test time	5000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
8	Humidity Test (+60°C 90% to 95% RH 1000 hours No applied voltage)	Test time	1000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
9	Surge Voltage Test (At normal temperature, charge at surge voltage for 30 second and discharge via a 1KΩ protective resistor for 330 second. Repeat for 1000 cycles)	Test time	1000cycles
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
10	Applicable standards	JIS-C-5101-4	

Diagram of Dimensions



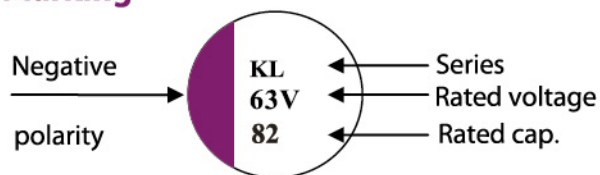
Lead Spacing and Diameter

Unit: mm

øDxL	øD +0.5max	a	F±0.5	ød±0.05
6.3X8	6.3	1.0	2.5	0.6
8X8	8.0	1.0	3.5	0.6
8X11.5	8.0	1.0	3.5	0.6
10X12.5	10.0	1.0	5.0	0.6

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Marking



Frequency Coefficient for Ripple Current

Frequency (Hz)	$120 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F < 500K$
Coefficient	0.05	0.3	0.7	1

Dimension & Permissible Ripple Current

Dimension: $\phi D \times L$ (mm)
Ripple Current: mA/rms at 100KHz, 105 °C

V.DC Contents μF	2.5V			4V			6.3V		
	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)
470	6.3X8	12	4000				88	10	4830
560	6.3X8	12	4000	8X8	10	4830	8X11.5	7	5580
680	8X8	10	4830	8X8	10	4830	8X11.5	7	5580
820	8X8	7	4830	8X11.5	7	5580	8X11.5	7	5580
1000	8X8	7	4830	8X11.5	7	5580	10X12.5	7	5580
1200	8X11.5	7	5580	8X11.5	7	5580	10X12.5	7	5580
1500	8X12.5	7	5580	8X12.5	7	5580			

V.DC Contents μF	10V			16V			25V		
	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)	$\phi D \times L$	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, 105 °C)
100				6.3X8	12	4000	6.3X8	30	25003080
180				8X8	12	4200	8X8	30	3260
220				8X8	12	4200	8X11.5	28	3520
270				8X11.5	11	4500	8X11.5	28	3850
330				8X11.5	11	4500	10X12.5	28	4100
470	8X11.5	12	5580	8X11.5	11	5580	10X12.5	28	
560	10X12.5	12	5580	10X12.5	11	5580			
680	10X12.5	12	5580	10X12.5	11	5580			
820	10X12.5	12	5580	10X12.5	12	5580			

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Dimension & Permissible Ripple Current

Dimension: Φ DxL(mm)
Ripple Current: mA/rms at 100KHz, 105 °C

V.DC Contents μ F	35V			50V			63V		
	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)
22	6.3X8	60	2000	8X8	45	2600	6.3X8	60	2000
33	6.3X8	60	2000	8X8	45	2600	6.3X8	60	2000
39	6.3X8	60	2000	8X8	45	2600	6.3X8	60	2000
47	8X8	35	2600	8X11.5	45	2700	8X8	45	2900
56	8X11.5	30	2980	8X11.5	45	2700	8X11.5	30	2900
68	8X11.5	30	2980	10X12.5	45	2900	8X11.5	30	2900
68	10X12.5	28	3800						
82	8X11.5	30	2980	10X12.5	45	2900			
82	10X12.5	28	3800				10X12.5	30	2900
100	8X11.5	30	2980	10X12.5	45	2900			
100	10X12.5	28	3800				10X12.5	30	2900
220	10X12.5	28	3800						
330	10X12.5	28	3800						

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Dimension & Permissible Ripple Current

Dimension: Φ DXL(mm)
Ripple Current: mA/rms at 100KHz, 105 °C

V.DC Contents μ F	80V			100V		
	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)
4.7	6.3X8	60	1700	8X8	45	1700
10	6.3X8	60	1700	8X8	45	1700
10				8X11.5	45	1900
15	8X8	45	1900	10X12.5	45	2100
22	8X11.5	45	2700	10X12.5	45	2100
22	10X12.5	45	2900			
33	10X12.5	45	2900			
39	10X12.5	45	2900			
47	10X12.5	45	2900			

V.DC Contents μ F	160V			200V		
	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)	Φ DxL	ESR m Ω /100KHz 20 °C	Ripple Current (mA/rms, T \leq 105 °C)
1.8	8X8	80	800	10X12.5	150	500
3.3	8X8	80	800	10X12.5	150	500
4.7	10X12.5	80	1200	10X12.5	150	500
10	10X12.5	80	1200			