LAK Series 105 ˚C

Specifications

Item	Characteristics	
Operating Temperature Range	-40 ~ +105 °C	-25 ~ +105 °C
Rated Working Voltage Range	10 V ~ 100 V DC	160 V ~ 450 V DC
Capacitance Tolerance (120 Hz, 25 °C)	±20 % (M)	
Leakage Current (+25 °C, max.)	10 V ~ 100 V DC 1 ⩽ 0.02 CV + 3 (μA)	160 V ~ 450 V DC 1 ⩽ 0.03 CV + 40 (μA)

I: Leakage Current (μA)
C: Rated Capacitance (μF)
V: Working Voltage (V)
After 5 minutes applying the DC working voltage

Surge Voltage (25 °C)

W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450
S.V.	13	20	32	44	63	79	125	200	250	300	400	450	500

Dissipation Factor (120 Hz, 25 °C)

For capacitance exceeding 1000 μF, add 0.02 per increment of 1000 μF

W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450
Tan δ	0.20	0.17	0.15	0.12	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.24	0.24

Temperature Characteristics (tan δ)

Impedance radio at 120Hz

W. V.	10	16	25	35	50	63	100	160	200	250	350	400	450
-25 °C/+25 °C	4	3	3	2	2	2	2	8	8	8	12	15	16
-40 °C/+25 °C	8	6	4	3	3	3	3	6	6	10	-	-	-

Load test

After 1000 hours application of W.V. AT+105 °C
the capacitor shall meet the following limits.

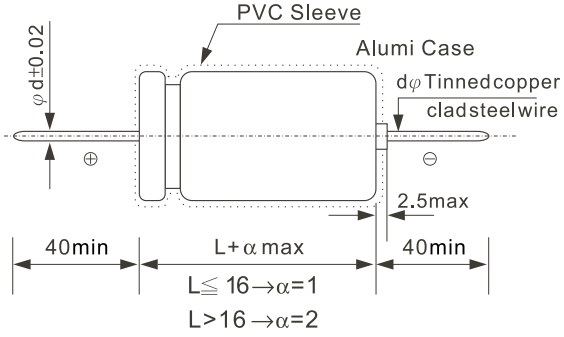
Capacitance Change	⩽ ±20 % of initial value
Tan δ	⩽ ±150 % of initial specified value
Leakage Current	⩽ initial specified value

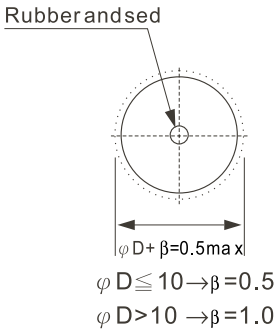
Shelf test

After 500 hours application of W.V. AT+105 °C
the capacitor shall meet the following limits.

Capacitance Change	⩽ ±20 % of initial value
Tan δ	⩽ ±200 % of initial specified value
Leakage Current	⩽ ±20 % initial specified value

Diagram of Dimensions: (Unit: mm)





D	6	8	10	13	16	18	20	22
d ± 0.02	0.5	0.5	0.6	0.6	0.8	0.8	0.8	0.8

Dimension & Permissible Ripple Current

Dimension: φD x L (mm) — Ripple Current: mA (rms) at 120 Hz, 105 °C

W.V. / μF	10 V		16 V		25 V		35 V		50 V		63 V		100 V	
	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA
0.47									6x13	8	6x13	8	6x13	10
1									6x13	12	6x13	12	6x13	14
2.2									6x13	18	6x13	20	6x13	22
3.3									6x13	23	6x13	24	6x13	27
4.7									6x13	27	6x13	29	6x13	34
10					6x13	40	6x13	40	6x13	40	6x13	48	8x16	58
22					6x13	48	6x13	59	6x13	62	6x13	81	8x20	100
33			6x13	58	6x13	65	6x13	69	8x16	88	8x16	99	8x20	135
47	6x13	60	6x13	73	6x13	77	8x13	105	8x16	115	8x16	138	10x21	150
100	6x13	98	6x16	102	8x16	140	8x16	205	8x16	252	10x21	280	13x22	300
220	8x16	170	8x16	220	8x16	260	10x21	305	10x20	320	13x22	394	16x28	505
330	8x16	243	8x16	250	10x21	320	10x21	350	13x22	415	13x26	505	16x33	660
470	8x16	315	10x17	385	10x21	420	13x22	530	13x26	640	16x26	715	18x36	875
1000	10x21	480	13x22	615	13x26	760	13x26	820	16x33	955	16x36	1150		
2200	13x22	940	13x26	1000	16x28	1050	16x36	1165	18x36	1680	22x42	1980		
3300	13x26	1150	16x33	1340	16x36	1500	18x36	1800	22x42	2080				
4700	16x28	1400	16x36	1580	18x36	1980	22x42	2100						

W.V. / uF	160 V		200 V		250 V		350 V		400 V		100 V	
	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA	ØD x L	mA
0.47	6x13	10	6x13	10	6x13	10	6x13	10	6x16	10	6x16	10
1	6x13	10	6x16	10	6x16	11	8x16	11	8x16	13	8x16	13
2.2	8x16	16	8x16	16	8x16	21	10x17	21	10x17	32	10x17	32
3.3	8x16	26	10x17	26	10x17	26	10x27	26	10x21	33	10x21	33
4.7	8x16	29	10x17	29	10x17	29	10x21	29	13x22	52	13x22	52
10	10x21	44	10x21	48	10x21	80	13x22	84	13x24	86	16x28	90
22	13x22	78	13x22	78	13x27	86	16x33	86	16x33	86	16x33	91
33	13x22	105	16x28	116	16x33	116	16x36	116	18x36			
47	16x28	175	16x33	238	16x33	238	16x36					
100	16x33	410	18x36	460	18x36	460						
220	22x42	515	22x42	585								