



# LAK Axial, General Purpose, 105°C

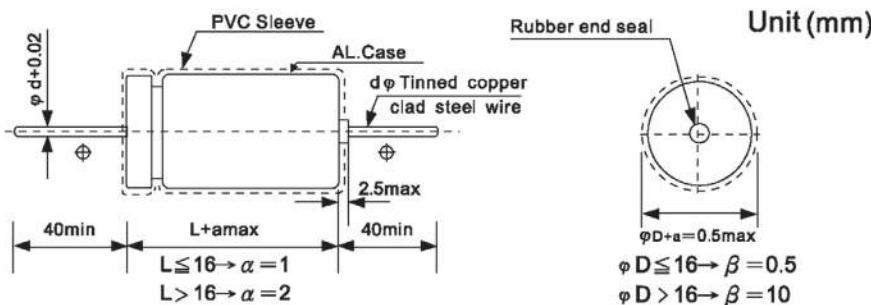
## Features

- Used in communication equipments, switching power supply, etc.
- Safety vent construction design

## Specifications

Item	Performance Characteristics	
Operating Temperature Range	-40 to +105°C	-25 to +105°C
Rated voltage Range	10 to 100 VDC	160 to 450 VDC
Capacitance Tolerance	±20% (120Hz, +20°C)	
Leakage Current (at 20°C)	10V ~100V DC	160V~450V DC
	$I \leq 0.02CV + 3(\mu A)$	$I \leq 0.05CV + 4(\mu A)$
	I: Leakage current(μA) C: Rated Capacitance(μF) V: Working Voltage[V] After 5 minutes applying the DC working voltage	
Surge Voltage(20°C)	W.V.	10 16 25 35 50 60 100 160 160 200 250 350 400 450
	S.V.	13 20 32 44 63 79 125 200 200 250 300 400 450 500
Dissipation Factor (120Hz, 20 °C)	W.V.	10 16 25 35 50 63 100 160 200 250 350 400 450
	Tanδ	0.20 0.17 0.15 0.12 0.10 0.10 0.10 0.20 0.20 0.20 0.20 0.24 0.24
	For capacitance exceeding 1000μF, add 0.02 Per increment of 1000μF	
Temperature Characteristics (Tanδ)	W.V.	10 16 25 35 50 63 100 160 200 250 350 400 450
	Impedance Ratio	-25 °C/+20 °C 4 3 3 2 2 2 2 8 8 8 12 15 16
		-40 °C/+20 °C 8 6 4 3 3 3 3 6 6 10 - - -
	Impedance ratio of 120Hz	
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
	Tanδ	≤±200% 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
	Tanδ	≤±200% of initial specified value
	Leakage Current	≤±200% of initial specified value

## Diagram of Dimensions: (Unit: mm)



Dφ	5	6	8	10	13
dφ	0.6	0.6	0.6	0.6	0.6

Dφ	16	18	20	22	25
dφ	0.8	0.8	0.8	0.8	0.8



# LAK Axial, General Purpose, 105°C

## Ripple Current & Frequency Multipliers

Freq.(Hz) \ Cap.(μF)	50(60)	120	500	1K	10K UP
Under 100	0.70	1.00	1.30	1.40	1.50
100<C≤1000	0.75	1.00	1.20	1.30	1.35
1000 up above	0.80	1.00	1.10	1.12	1.15

## Case Size

φD x L (mm)

μF \ W.V.	10		16		25		35		50	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47									6x13	8
1									6x13	12
2.2									6x13	18
3.3									6x13	23
4.7									6x13	27
10					6x13	40	6x13	40	6x13	40
22					6x13	48	6x13	59	6x13	62
33			6x13	58	6x13	65	6x13	69	8x16	88
47	6x13	60	6x13	73	6x13	77	6x13	105	8x16	115
100	8x16	98	6x16	102	8x16	140	8x16	205	8x16	252
220	8x16	170	8x16	220	8x16	260	8x16	305	10x20	320
330	8x16	243	8x16	250	10x21	320	10x21	350	13x22	415
470	8x16	315	10x17	385	10x21	420	13x22	530	13x26	640
1000	10x21	480	13x22	615	13x26	760	13x26	820	16x33	955
2200	13x22	940	13x26	1000	16x28	1050	16x36	1165	18x36	1680
3300	13x26	1150	16x33	1340	16x36	1500	18x36	1800	22x42	2080
4700	16x28	1400	16x36	1580	18x36	1980	22x42	2100		

•Ripple Current (mA, rms) at 105°C 120Hz



# LAK Axial, General Purpose, 105°C

## Case Size

φD x L (mm)

W.V. μF	63		100		160		200		250	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	6x13	8	6x13	10	6x13	10	6x13	10	6x13	10
1	6x13	12	6x13	14	6x13	10	6x16	10	6x16	11
2.2	6x13	20	6x13	22	8x16	16	8x16	16	8x16	21
3.3	6x13	24	6x13	27	8x16	26	10x17	26	10x17	26
4.7	6x13	29	6x13	34	8x16	36	10x17	38	10x17	40
10	6x13	48	8x16	58	10x21	60	10x21	68	10x21	78
22	6x13	81	8x20	100	13x22	82	13x22	92	13x27	92
33	8x16	99	8x20	135	13x22	105	16x28	116	16x33	116
47	8x16	138	10x21	150	16x28	175	16x33	238	16x33	238
100	10x21	280	13x22	300	16x33	410	18x36	460	18x36	460
220	13x22	394	16x28	505	22x42	515	22x42	585	-	-
330	13x26	505	16x33	660	-	-	-	-	-	-
470	16x26	715	18x36	875	-	-	-	-	-	-
1000	16x36	1150	-	-	-	-	-	-	-	-
2200	22x42	1980	-	-	-	-	-	-	-	-

•Ripple Current (mA, rms) at 105°C 120Hz

W.V. μF	350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple
0.47	6x13	10	6x16	10	6x16	10
1	8x16	11	8x16	13	8x16	13
2.2	10x17	26	10x17	32	10x17	32
3.3	10x17	30	10x21	33	10x21	33
4.7	10x21	49	13x22	52	13x22	52
10	13x22	84	13x24	86	16x28	90
22	16x33	86	16x33	86	16x33	91
33	16x36	116	18x36	135	-	-
47	16x36	238	-	-	-	-

•Ripple Current (mA, rms) at 105°C 120Hz

AXIAL