

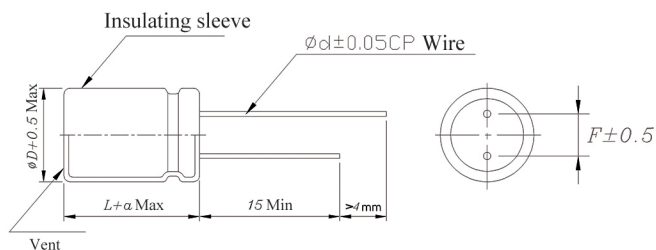
LLK

- ◆ 105°C 12000~20000 Hours
- ◆ Super Long Life
- ◆ RoHS Compliant



■ Specification

Items	Characteristics						
Operation Temperature Range	-40°C ~ +105°C ; -25°C ~ +105°C						
Rated Voltage	160 ~ 400V.DC ; 450V.DC						
Capacitance Tolerance	±20% (25±2°C 120Hz)						
Leakage Current(µA)	CV ≤ 1000	I = 0.1CV+40µA(1minute reading) I = 0.03CV+15µA(5 minutes reading)					
	CV > 1000	I = 0.04CV+100µA(1minute reading) I = 0.02CV+25µA(5 minutes reading)					
	I=leakage current(µA) C=Rated electrostatic capacity(µF) V=Rated Voltage(V)						
Dissipation Factor (25±2°C 120Hz)	Rated Voltage(V)	160	200	250	350	400	450
	tgδ	0.24	0.24	0.24	0.24	0.24	0.24
Endurance	After standard test time with applying the rated voltage with the rated ripple current in the oven at 105°C, the following specification shall be satisfied after 16 hours at 25±2°C.						
	Capacitance change	within±30% of the intial value					
	Dissipation Factor	Not more than 300% of the specified value					
	Leakage current	Not more than the specified value					
	Load life(hours)	Size	Load life(hours)				
5×11 6.3×9 6.3×11 8×9 10×9		12000hrs					
8×11.5 10×12.5		15000hrs					
10×16 10×20 10×23 D ≥ 12.5	20000hrs						
Temperature Characteristics (120Hz)	Rated Voltage(V)	160	200	250	400	450	
	Z(-25°C)/Z(20°C)	3	3	3	6	6	
	Z(-40°C)/Z(20°C)	8	8	8	10	10	
Shelf Life At High Temperature	After leaving capacitors under no load at 105°C for 1000 hours, the following specification shall be satisfied at 25±2°C.						
	Capacitance change	within±20% of the intial value					
	Dissipation Factor	Not more than 200% of the specified value					
	Leakage current	Not more than 200% of the specified value					

Standard Size (Unit: mm)


Remark: capacitors with diameter more than 6.3 have safety vent

L=9	a=1.0
L≤16	a=1.5
L>16	a=2.0

D	5	6.3	8	10	12.5	16	18
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5

Ripple Current Correction Factor
① Frequency Correction Factor

160 ~ 400V

Frequency(Hz)		120	1K	10K	100K≤
Coefficient	1 ~ 5.6 μF	1.0	1.6	1.8	2.0
	6.8 ~ 18 μF	1.0	1.5	1.7	1.9
	22 ~ 68 μF	1.0	1.4	1.6	1.8

450V

Frequency(Hz)		120	1K	10K	100K≤
Coefficient	1 ~ 15 μF	1.0	2.0	3.0	3.3
	18 ~ 68 μF	1.0	1.75	2.25	2.5

② Temperature Correction Factor

Environment Temperature(°C)	50°C	70°C	85°C	105°C
Correction Factor	2.1	1.8	1.4	1.0

■ Standard Size

Voltage (V)	160			200			250			400		
	Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)
1.0	5×11	18.0	27	5×11	16.0	27	6.3×9	15.0	27	6.3×9	29.0	26
1.2	5×11	18.0	27	5×11	16.0	27	6.3×9	15.0	27	6.3×9	25.0	30
1.5	5×11	18.0	32	5×11	16.0	32	6.3×9	15.0	32	6.3×9	22.0	32
1.8	5×11	17.0	32	5×11	15.0	32	6.3×9	13.0	35	6.3×9	18.0	35
2.2	5×11	17.0	38	5×11	14.0	39	6.3×9	13.0	40	6.3×9	14.5	39
2.7	5×11	17.0	38	5×11	13.0	45	6.3×9	12.0	45	8×9	9.5	45
3.3	5×11	14.0	45	6.3×9	12.0	45	6.3×9	11.5	45	8×11.5	9.8	50
3.3										10×9	9.2	51
3.9	6.3×9	14.0	55	6.3×9	11.0	45	6.3×9	10.5	50	10×9	8.5	60
4.7	6.3×9	13.5	55	6.3×11	10.0	52	8×9	9.5	59	10×9	7.0	64
5.6	6.3×11	13.2	55	8×9	8.0	59	8×9	8.5	70	10×12.5	6.5	69
6.8	6.3×11	13.0	63	8×9	7.0	65	8×11.5	6.0	85	10×12.5	5.5	90
8.2	8×9	12.0	63	8×9	6.0	70	8×11.5	6.0	85	10×14	5.0	90
10	8×9	9.5	75	8×11.5	5.2	85	10×12.5	4.4	120	10×16	4.6	100
12	8×11.5	7.0	98	10×9	4.8	93	10×12.5	4.4	120	10×20	4.2	120
15	8×11.5	7.0	98	10×12.5	4.0	118	10×12.5	2.8	132	10×20	3.5	148
15	10×9	7.0	100									
18	10×12.5	6.3	120	10×12.5	3.8	118	10×16	2.5	161	12.5×16	2.5	195
22	10×12.5	5.5	128	10×16	3.5	138	10×16	2.0	179	12.5×20	2.5	195
27	10×12.5	5.0	128	10×16	2.7	160	10×20	1.8	200	12.5×20	2.5	250
33	10×16	4.8	170	10×20	2.2	175	10×20	1.6	228	12.5×25	2.0	300
39	10×20	3.7	200	10×23	1.8	200	12.5×20	1.5	250	12.5×25	2.0	380
47	10×20	3.7	200	12.5×20	1.5	250	12.5×20	1.5	300	16×25	1.8	450
68	12.5×20	2.2	240	12.5×25	1.3	300	16×20	1.3	350	16×31.5	1.5	520

Voltage (V)	450			Voltage (V)	450			Voltage (V)	450		
Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)	Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)	Items Capacitance (μF)	Size D×L(mm)	Impedance (Ω max/100KHz 25±2°C)	Ripple Current (mA/r.m.s /105°C120Hz)
1.0	6.3×9	35.0	30	3.9	10×9	9.5	55	18	12.5×20	5.5	200
1.2	6.3×9	30.0	30	4.7	10×12.5	8.5	60	22	12.5×20	5.5	250
1.5	6.3×9	25.0	32	5.6	10×12.5	8.5	60	27	12.5×25	5.5	280
1.8	8×9	20.0	35	6.8	10×14	6.5	90	33	16×20	5.0	420
2.2	8×9	18.0	40	8.2	10×14	6.5	90	39	16×25	4.5	490
2.7	8×9	18.0	40	10	12.5×14	6.0	145	47	18×20	4.0	505
3.3	8×11.5	14.0	44	12	12.5×14	6.0	145	68	18×31.5	3.5	550
3.3	10×9	9.5	55	15	12.5×16	5.5	190				