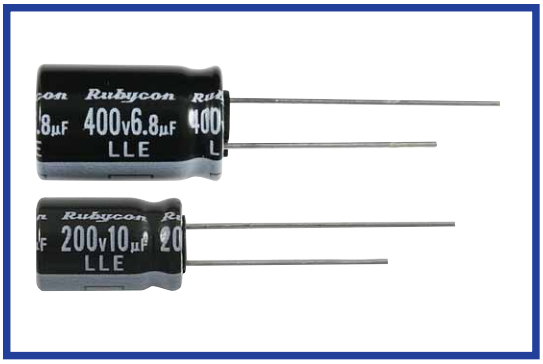
LLE SERIES

Load Life: 105℃ 12000～20000 hours



◆FEATURES

- Ultra Long Life.
- For LED Lighting.
- RoHS compliance.

◆SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	−40～+105℃	−25～+105℃
Rated Voltage Range	160～400Vdc	450Vdc
Capacitance Tolerance	±20%(20℃,120Hz)	
Leakage Current(MAX)	CV≦1000: I=0.1CV+40μA (1minute) I=0.03CV+15μA (5minutes) CV>1000: I=0.04CV+100μA (1minute) I=0.02CV+25μA (5minutes) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)	
(tanδ) Dissipation Factor(MAX)	Rated Voltage (Vdc): 160 / 200 / 250 / 400 / 450 tanδ: 0.24 / 0.24 / 0.24 / 0.24 / 0.24 (20℃,120Hz)	
Endurance	After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements. Capacitance Change: Within ±30% of the initial value. Dissipation Factor: Not more than 300% of the specified value. Leakage Current: Not more than the specified value. Case Size / Life Time (hrs): 6.3×11, 8×9, 10×9: 12000; 8×11.5, 10×12.5: 15000; 10×16, 10×20 φD≧12.5: 20000	
Low Temperature Stability Impedance Ratio(MAX)	Rated Voltage (Vdc): 160 / 200 / 250 / 400 / 450 Z(−25℃)/Z(20℃): 3 / 3 / 3 / 6 / 6 Z(−40℃)/Z(20℃): 8 / 8 / 8 / 10 / − (120Hz)	

◆MULTIPLIER FOR RIPPLE CURRENT

160～400Vdc

Frequency(Hz)		120	1k	10k	100k≦
Coefficient	1～5.6μF	1.0	1.6	1.8	2.0
	6.8～18μF	1.0	1.5	1.7	1.9
	22～33μF	1.0	1.4	1.6	1.8

450Vdc

Frequency(Hz)		120	1k	10k	100k≦
Coefficient	4.7～15μF	0.3	0.6	0.9	1.0
	22～68μF	0.4	0.7	0.9	1.0

◆OPTION

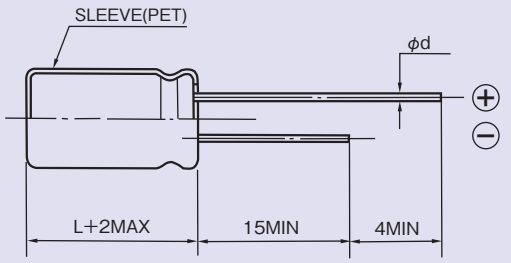
	Code
PET Sleeve	EFC

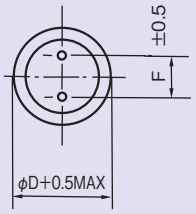
◆PART NUMBER

□□□ Rated Voltage | LLE Series | □□□□□ Capacitance | M Capacitance Tolerance | □□□ Option | □□ Lead Forming | D×L Case Size

◆DIMENSIONS

(mm)





ϕD	6.3	8	10	12.5	16	18
ϕd	0.5	0.6			0.8	
F	2.5	3.5	5		7.5	

◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size ϕD×L (mm)	Rated Ripple Current (mA r.m.s., 105℃)	
			120Hz	100kHz
160	5.6	6.3×11	52	104
	10	8×9	70	133
	15	8×11.5	92	174
		10×9	95	180
	22	10×12.5	121	217
	33	10×16	158	284
200	2.2	6.3×11	36	72
	3.3	6.3×11	42	84
	4.7	6.3×11	49	98
	5.6	8×9	56	112
	6.8	8×9	62	117
	8.2	8×9	66	125
	10	8×11.5	80	152
	12	10×9	88	167
	18	10×12.5	113	214
	27	10×16	149	268
250	1.8	6.3×11	33	66
	2.2	6.3×11	36	72
	3.3	6.3×11	42	84
	4.7	8×9	53	106
	5.6	8×11.5	62	124
	6.8	8×11.5	68	129
	8.2	10×9	76	144
	10	10×12.5	90	171
	12	10×12.5	97	184
	18	10×16	127	241

Rated Voltage (Vdc)	Capacitance (μF)	Size ϕD×L (mm)	Rated Ripple Current (mA r.m.s., 105℃)	
			120Hz	100kHz
400	1	6.3×11	24	48
	1.2	8×9	28	56
	1.5	8×9	30	60
	1.8	8×9	33	66
	2.2	8×9	36	72
		8×11.5	40	80
	2.7	8×11.5	43	86
	3.3	8×11.5	47	94
		10×9	48	96
	3.9	10×12.5	57	114
	4.7	10×12.5	61	122
	6.8	10×16	85	161
450	4.7	10×16	54	180
		10×20	66	220
	6.8	10×20	84	280
	8.2	10×20	84	280
	10	12.5×20	135	450
	15	12.5×25	180	600
	22	12.5×25	240	600
		16×20	292	730
	33	16×25	392	980
		18×20	312	780
	47	18×25	480	1200
	68	18×31.5	520	1300