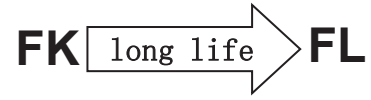


FL Series Long Life 105°C

Feature

- ◆ Specially designed for electronic ballast, energy-save lamp and LED driving power
- ◆ Endurance 8000~12000 hrs at 105°C
- ◆ Safety vent construction design.
- ◆ RoHS Compliant



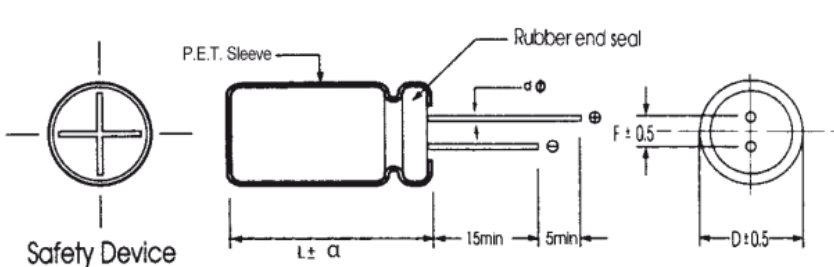
Specifications

Item	Performance Characteristics									
Operating Temperature Range	-40 to +105°C (160~450Vde)	-25 to +105°C (500Vde)								
Rated Voltage Range	160 to 500 VDC									
Capacitance Range	1.0 to 680 μF									
Capacitance Tolerance	±20% (120Hz, +20°C)									
Leakage Current (+20°C, max.)	(CV ≤ 1000)	(CV > 1000)	After 1minutewith ratedworking voltage applied. C:: ratedCapacitance (μF), V: working voltage(V)							
	1 ≤ 0.1CV+40(μA)	1 ≤ 0.04CV+100(μA)								
Dissipation Factor (tanδ, at 20°C, 120Hz)	Working Voltage(VDC)	160	200	250	350	400	420	450	500	
	D.F. (%)max.	15	15	15	20	20	20	20	24	
Low Temperature Characteristics (at 120Hz)	Impedance ratio max									
	Working Voltage(VDC)	160	200	250	350	400	420	450	500	
	Z-25°C / Z+20°C	3	3	3	5	5	6	6	6	
	Z-40°C / Z+20°C	6	6	6	6	6	8	8	-	
Endurance	Test conditions					Dφ		Life (hours)		
	Duration time	:As right					6.3φ,8φ	8000		
	Ambient temperature	:+105°C					10φ	10000		
	Applied voltage	:Rated DC working voltage					≥13φ	12000 (500V:10000)		
	After test requirement at +20°C									
	Capacitance change	: with±20% of the initial measured value								
	Dissipation factor	: ≤ 200% of the initial specified value								
	Leakage current	: ≤ The initial specified value								
Shelf Life	Test conditions									
	Duration time	:1000Hrs								
	Ambient temperature	:+105°C								
	Applied voltage	:None								
	After test requirement at +20°C:Same limits as Endurance.									
	Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.									

Multiplier for Ripple Current vs.

Frequency(Hz)	120	1K	10K	100KHz
CAP(μF)				
1~82	1.00	1.75	2.25	2.50
≥100	1.00	1.67	2.05	2.25

Diagram of Dimensions:(unit:mm)



Dφ	8	10	13	16	18	20	22
F	3.5	5.0	5.0	7.5	7.5	10	10
dφ	L<20	L≥20		0.6		0.8	
	0.5	0.6					

α	D<18	D=18		D>18
		L<35.5	L≥35.5	
	1.5	1.5	2.0	2.0

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (Arms/105°C /120Hz)	Rated Ripple current (Arms/105°C /100KHz)	WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (Arms/105°C /120Hz)	Rated Ripple current (Arms/105°C /100KHz)
160	1	6.3×11	18	46	200	68	13×25	520	1300
160	1.5	6.3×11	20	51	200	68	16×21	520	1300
160	2.2	6.3×11	25	62	200	82	16×21	560	1400
160	3.3	6.3×11	37	93	200	100	13×25	640	1450
160	4.7	8×11.5	38	95	200	100	16×21	670	1500
160	5.6	8×11.5	40	100	200	100	16×25	690	1550
160	6.8	8×11.5	50	125	200	100	18×21	710	1600
160	6.8	8×16	59	148	200	120	16×21	720	1620
160	10	8×11.5	72	180	200	150	16×21	790	1780
160	15	8×16	100	250	200	150	16×25	840	1900
160	15	10×12.5	100	260	200	150	18×25	890	2000
160	22	10×16	140	350	200	180	16×25	910	2050
160	22	10×20	150	380	200	180	18×21	910	2050
160	33	10×16	190	480	200	220	18×25	1050	2370
160	33	10×20	210	520	200	220	18×31.5	1160	2600
160	39	10×16	240	600	200	270	16×35.5	1250	2820
160	47	10×20	300	760	200	330	16×41	1430	3210
160	56	10×20	310	770	200	330	18×31.5	1400	3140
160	68	13×20	480	1190	200	330	18×35.5	1440	3230
160	68	13×25	520	1310	200	390	18×35.5	1520	3420
160	82	10×25	440	1100	200	470	18×41	1750	3930
160	82	13×20	510	1280	200	470	18×45	1820	4100
160	100	13×20	590	1330	220	27	10×16	200	510
160	100	13×25	630	1420	220	39	10×20	270	670
160	100	16×21	630	1420	220	68	13×20	480	1190
160	150	13×25	730	1650	220	150	16×25	850	1910
160	150	16×21	770	1740	220	220	16×31.5	1110	2500
160	150	16×25	820	1850	220	270	18×31.5	1260	2840
160	180	16×21	870	1950	220	330	16×45	1450	3270
160	220	16×25	1020	2300	220	390	18×45	1620	3650
160	220	18×21	1000	2250	220	470	18×51	1840	4150
160	220	18×25	1040	2350	250	1	6.3×11	26	65
160	330	16×31.5	1350	3040	250	1.5	6.3×11	28	70
160	330	18×31.5	1380	3100	250	2.2	6.3×11	34	85
160	390	16×35.5	1510	3400	250	3.3	6.3×11	46	115
160	470	16×41	1710	3850	250	3.3	8×11.5	60	150
160	470	18×35.5	1720	3860	250	4.7	8×11.5	68	170
160	560	18×51	1910	4290	250	5.6	8×11.5	76	190
160	680	18×45	2130	4800	250	6.8	8×16	96	240
200	1	6.3×11	26	65	250	6.8	10×12.5	96	240
200	1.5	6.3×11	28	70	250	8.2	8×20	120	290
200	2.2	6.3×11	34	85	250	10	8×16	120	300
200	3.3	6.3×11	46	115	250	10	10×16	130	330
200	4.7	8×11.5	64	160	250	15	8×20	150	380
200	5.6	8×11.5	66	166	250	22	10×16	200	490
200	6.8	8×11.5	70	175	250	22	10×20	220	540
200	6.8	10×12.5	76	190	250	22	13×20	250	620
200	10	8×16	92	230	250	33	10×20	270	680
200	10	10×16	100	260	250	33	13×16	270	680
200	12	10×12.5	100	260	250	33	13×20	320	800
200	15	8×20	140	350	250	47	13×20	400	990
200	22	10×16	180	450	250	47	13×25	410	1020
200	22	10×20	200	500	250	47	16×21	450	1120
200	27	10×16	200	510	250	56	13×20	430	1070
200	33	10×20	260	660	250	68	13×25	500	1240
200	33	13×20	300	750	250	68	16×21	530	1320
200	47	10×20	310	770	250	68	16×25	570	1420
200	47	13×20	400	990	250	68	18×21	570	1420
200	56	10×25	380	950	250	82	13×25	570	1420
200	68	13×20	470	1180	250	82	16×21	580	1450

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (Arms/105°C /120Hz)	Rated Ripple current (Arms/105°C /100KHz)	WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (Arms/105°C /120Hz)	Rated Ripple current (Arms/105°C /100KHz)
250	100	16x25	760	1700	400	4.7	8x11.5	72	180
250	100	16x31.5	800	1800	400	4.7	8x20	92	230
250	100	18x21	720	1630	400	4.7	10x16	96	240
250	100	18x25	780	1750	400	5.6	8x20	100	250
250	120	16x25	780	1750	400	5.6	10x16	100	250
250	120	18x21	780	1750	400	5.6	10x20	110	280
250	150	18x25	890	2000	400	6.8	8x20	120	290
250	150	18x31.5	980	2200	400	6.8	10x16	120	300
250	180	16x31.5	1020	2300	400	8.2	10x16	120	300
250	180	18x25	980	2200	400	8.2	10x20	130	320
250	220	16x35.5	1130	2550	400	10	10x16	130	330
250	220	18x31.5	1130	2550	400	10	10x20	140	350
250	270	16x41	1290	2900	400	15	10x20	180	460
250	270	18x35.5	1310	2950	400	15	13x20	200	500
250	330	18x41	1460	3290	400	22	13x20	280	690
350	1	8x11.5	30	75	400	22	13x25	310	770
350	1.5	8x11.5	32	80	400	22	16x21	320	790
350	2.2	10x12.5	44	110	400	27	13x20	300	750
350	3.3	10x12.5	60	150	400	33	13x25	330	820
350	4.7	10x16	80	200	400	33	16x21	340	840
350	6.8	10x16	100	260	400	39	13x25	390	980
350	10	10x20	130	330	400	47	16x25	480	1200
350	15	10x20	160	400	400	47	16x31.5	530	1320
350	18	10x20	180	450	400	47	18x21	470	1180
350	22	10x20	200	500	400	47	18x25	510	1270
350	22	13x20	260	650	400	56	16x25	500	1260
350	27	10x25	260	650	400	56	18x21	500	1250
350	33	13x20	330	830	400	68	16x25	580	1440
350	33	13x25	360	900	400	68	18x25	630	1570
350	33	16x21	380	940	400	68	18x31.5	700	1740
350	47	13x25	430	1070	400	82	16x31.5	660	1660
350	47	16x21	440	1100	400	82	18x25	650	1620
350	47	18x21	470	1180	400	82	18x31.5	710	1770
350	56	16x21	480	1200	400	100	16x35.5	760	1720
350	68	16x25	570	1420	400	100	18x31.5	770	1740
350	68	16x31.5	620	1550	400	120	16x41	870	1950
350	68	18x21	570	1420	400	120	18x35.5	870	1960
350	68	18x25	620	1550	400	150	18x41	1020	2300
350	82	16x25	620	1560	400	180	18x45	1100	2480
350	82	18x25	640	1600	420	6.8	10x16	120	300
350	100	16x31.5	800	1800	420	12	10x20	150	380
350	100	18x25	780	1750	420	15	10x25	190	470
350	120	16x35.5	860	1930	420	22	13x20	290	720
350	120	18x31.5	870	1950	420	27	13x25	340	850
350	150	16x41	1020	2300	420	33	16x21	390	970
350	150	18x35.5	1020	2300	420	47	16x25	500	1260
350	180	18x41	1080	2440	420	47	18x21	500	1260
400	1	8x9	26	65	420	68	16x31.5	650	1620
400	1	8x11.5	30	75	420	68	18x25	620	1550
400	1.5	8x9	30	76	420	82	16x35.5	730	1830
400	1.5	8x11.5	36	91	420	82	18x31.5	730	1830
400	1.5	8x16	40	101	420	100	16x41	830	1870
400	2.2	8x11.5	40	100	420	100	18x35.5	840	1890
400	2.2	8x16	56	140	420	120	18x41	930	2100
400	3.3	8x11.5	52	130	420	120	18x45	950	2130
400	3.3	8x16	60	150	420	150	18x51	1060	2390
400	3.3	8x20	61	153	450	1	8x9	26	65
400	3.3	10x12.5	60	151	450	1	8x11.5	33	83
400	3.3	10x16	73	182	450	1.5	8x11.5	37	92
400	3.9	8x16	66	165	450	1.5	10x9	37	93

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (Arms/105°C /120Hz)	Rated Ripple current (Arms/105°C /100KHz)
450	1.8	8×11.5	39	97
450	1.8	10×9	39	98
450	2.2	8×16	56	141
450	3.3	8×16	61	153
450	4.7	10×16	92	230
450	5.6	10×16	100	260
450	6.8	10×16	130	320
450	6.8	10×20	140	350
450	8.2	10×20	140	350
450	10	10×20	140	360
450	10	10×25	160	400
450	10	13×16	150	380
450	15	10×25	190	470
450	15	13×20	200	500
450	18	13×20	260	640
450	22	13×25	290	720
450	22	16×21	300	750
450	22	18×21	320	790
450	27	13×25	340	850
450	33	16×21	390	970
450	33	16×25	420	1050
450	33	16×31.5	460	1160
450	33	18×21	420	1040
450	33	18×25	450	1120
450	39	18×21	440	1110
450	47	16×25	500	1260
450	47	16×31.5	560	1390
450	47	18×25	540	1340
450	47	18×31.5	590	1480
450	56	16×31.5	590	1470
450	56	18×25	560	1400
450	56	18×31.5	630	1570
450	68	16×35.5	660	1650
450	68	18×31.5	660	1660
450	82	16×41	750	1880
450	82	18×31.5	720	1790
450	82	18×35.5	750	1880
450	100	18×35.5	840	1890
450	100	18×41	900	2020
450	120	18×45	950	2130
450	150	18×51	1070	2400
500	10	13×20	130	330
500	12	13×20	140	350
500	15	13×25	180	450
500	15	16×21	180	450
500	22	16×25	230	570
500	22	18×21	220	560
500	33	16×31.5	290	720
500	33	18×25	280	700
500	47	18×31.5	360	890
500	56	18×35.5	390	970
500	68	18×41	420	1060