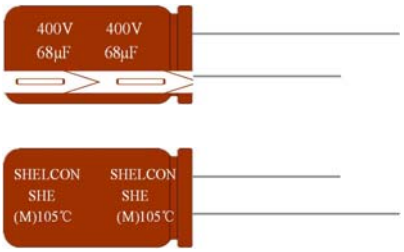
SHE SERIES

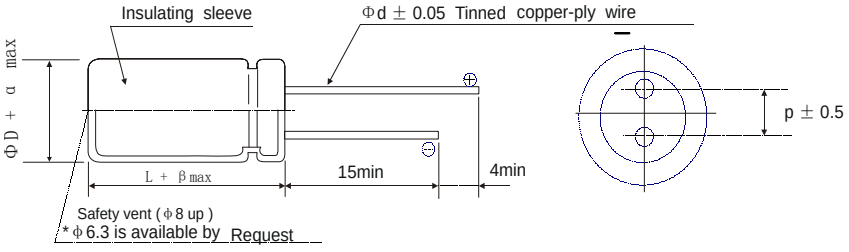


- High Ripple Current
- For Electronic Ballast
- Load Life: 105℃ 5000~8000 hours

◆ SPECIFICATIONS

Item	Characteristics
Category Temperature Range	-25~+105℃
Voltage Range	160 ~ 450V.DC
Nominal Cap. Range	1.0~220μF
Capacitance Tolerance	- 20% ~ + 20% (at 20℃, 120Hz)
Leakage Current	CV≦1000: I≦0.1CV+40μA(1min.), I≦0.03CV+15μA(5min.) CV＞1000: I≦0.04CV+100μA(1min.), I≦0.02CV+25μA(5min.) I: Leakage Current (μA) C: Nominal Capacitance (μF) V: Rated Voltage (V)
Dissipation Factor (tanδ) (at 120Hz, +20℃)	Rated voltage(V.DC): 160 / 200 / 250 / 350 / 400 / 450 tanδ(max): 0.15 / 0.15 / 0.15 / 0.20 / 0.20 / 0.20
Low Temp. Impedance Stability at 120Hz	W.V.: 160 / 200 / 250 / 350 / 400 / 450 Z - 25℃ /Z + 20℃: 3 / 3 / 3 / 6 / 6 / 6
High Temp. Load Test	105℃, after life test with rated ripple current at conditions stated in the table below, the capacitor shall meet the following requirements. Capacitance change ≦±20% of the initial measured value Tanδ ≦ 200% of the initial specified value DC Leakage Current ≦ the initial specified value Size / Life Time: ≦Φ10 / 5000; ≧Φ13 / 8000
High Temp. Non-Load Test	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1000 hours at 105℃ without voltage applied. Capacitance Change ≦±25% of the initial measured value Tanδ ≦200% of the initial specified value DC Leakage Current ≦500% of the initial specified value

◆ DRAWING



Unit: (mm)

ΦD	8	10	13	16	18
Φd	0.5	0.6		0.8	
F	3.5	5.0		7.5	
β	1.5				
α	0.5				

▼ MULTIPLIER FOR RIPPLE CURRENT

(1) Frequeny coefficient

Cap(μF) \ Freq.(HZ)	120	1K	10K	100K
1 ~ 4.7	0.20	0.40	0.80	1.00
6.8 ~15	0.30	0.60	0.90	1.00
22 ~82	0.40	0.70	0.90	1.00
100 ~220	0.45	0.75	0.90	1.00

(2) Temperature coefficient

Ambient Temperature(℃)	40	60	85	105
Coefficient	2.0	1.5	1.3	1.0

SHE Series

■STANDARD RATINGS

WV(Vdc) / Parameter / Cap (μF)	160V		200V		250V	
	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)
4.7					8X11.5	160
6.8					10X12.5	250
10	10X16	320	10X16	320	10X16	320
22	10X20	500	10X20	500	10X20	500
33	10X20	650	10X20	650	13X20	800
47	10X20	750	13X20	980	13X20	980
68	13X20	1180	13X20 16X20	1300	16X20	1300
82	16x20	1200	16X20	1380	16X20	1380
100	13X20 16X20	420	16X20	1420	16X25	1530
150	13X25	1890	16X25	1890	18X25	1940
220	18X25	2370				

WV(Vdc) / Parameter / Cap (μF)	350V		400V		450V	
	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)
1.0			8X11.5 10X12.5	60 70		
1.5			8X11.5 10X12.5	90 100		
1.8			8X11.5 10X12.5	95 120		
2.2			8X11.5 10X12.5	95 140		
3.3			10X12.5 10X16	150 180		
4.7	10X12.5	150	10X16	220	10X20	220
5.6	10X12.5	180	10X16	250	10X20	250
6.8	10X16	280	10X16	280	10X20	280
10	10X20	350	10X20	350	13X20	450
15	13x20	400	13X20	550	13X25	600
22	13X20	650	13X25 16X20	760	16X20	730
33	16X20	900	16X20	900	16X25	980
47	16X20	1080	16X25 18X20	1180	18X25	1200
68	18X25	1470	18X25	1470		
82	18X25	1530				

Rated Ripple Current (mArms) at 105℃ 100KHz

Case Size: ΦDxL(mm)