

SH15

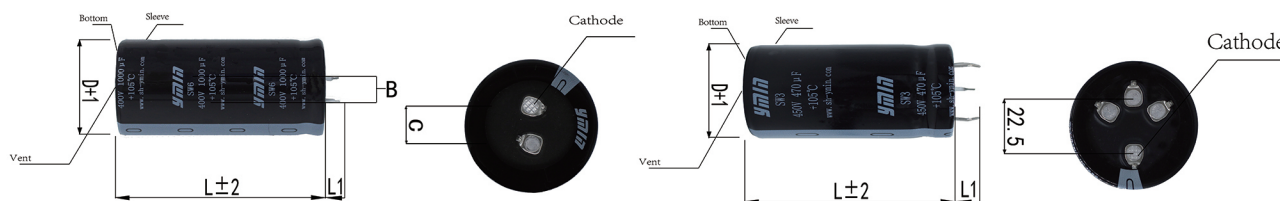
- ◆ 105°C 3000 Hours, 15mm Height
- ◆ High Reliability
- ◆ For Flat Type Power Supply
- ◆ RoHS Compliant



■ Specification

Items	Characteristics	
Temperature Range(°C)	160V~250V.DC -40°C ~ +105°C ; 315V~400V.DC -25°C ~ +105°C	
Voltage Range(V)	160 ~ 400V.DC	
Capacitance Range(µF)	39 ~ 390µF	
Capacitance Tolerance	±20% (20°C 120Hz)	
Leakage Current(mA)	≤0.94mA or $3\sqrt{CV}$, 5 minutes test @20°C	
Maximum DF(20°C)	0.15 (20°C, 120Hz)	
Temperature Characteristics(120Hz)	$C(-25^{\circ}\text{C})/C(+20^{\circ}\text{C})\geq 0.8$; $C(-40^{\circ}\text{C})/C(+20^{\circ}\text{C})\geq 0.65$	
Impedance Characteristics	$Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C})\leq 5$; $Z(-40^{\circ}\text{C})/Z(+20^{\circ}\text{C})\leq 8$	
Insulating Resistance	The value measured by applying DC 500V insulation resistance tester between all terminals and snap ring with insulating sleeve $\geq 100\text{m}\Omega$.	
Endurance	Apply rated ripple current on capacitor with voltage not more than rated voltage under 105°C environment and apply rated voltage for 3000hours, then recover to 20°C environment and the test results should satisfy the requirements as below.	
	Capacitance change rate (ΔC)	≤initial value ±20%
	DF (tgδ)	≤200% of initial specification value
Shelf Life	Capacitor kept in 105°C environment for 1000 hours, then tested in 20°C environment and the test result should satisfy the requirements as below.	
	Capacitance change rate (ΔC)	≤initial value ±15%
	DF (tgδ)	≤150% of initial specification value
Leakage current(LC)		≤initial specification value
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(Voltage pretreatment should be done before test: apply rated voltage on both ends of capacitor through a resistor of about 1000Ω for 1 Hrs, then discharge electricity through 1Ω / V resistor after pretreatment. Place under normal temperature for 24hrs after total discharging, then starts test.)		

■ Standard Size (Unit: mm)



ΦD	Φ22	Φ25	Φ30	Φ35	Φ40
B	11.6	11.8	11.8	11.8	12.25
C	8.4	10	10	10	10

■ Ripple Current Correction Factor

① Frequency Correction Coefficient Of Rated Ripple Current

Frequency(Hz)	50Hz	120Hz	500Hz	1KHz	≥10KHz
Coefficient	0.8	1.0	1.2	1.25	1.40

② Temperature Correction Coefficient Of Rated Ripple Current

Environment Temperature(°C)	40°C	60°C	85°C	105°C
Correction Factor	2.7	2.2	1.7	1.0

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■ Standard Size

Rated Voltage (Surge voltage) (V)	160(200)				180(225)			
Items Capacitance (μF)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)
150					22 × 15	1.56	0.58	894.65
180	22 × 15	1.67	0.62	801.23	25 × 15	1.97	0.73	853.02
220	25 × 15	2.1	0.78	748.36	30 × 15	2.24	0.83	805.46
270	30 × 15	2.48	0.92	683.24	30 × 15	2.64	0.98	731.25
330	30 × 15	2.64	0.98	601.23	35 × 15	2.94	1.09	601.23
390	30 × 15	3.07	1.14	508.46	35 × 15	3.1	1.15	508.65

Rated Voltage (Surge voltage) (V)	200(250)				250(300)			
Items Capacitance (μF)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)
100					22 × 15	1.32	0.49	1203.65
120	22 × 15	1.43	0.53	1032.47	25 × 15	1.56	0.58	1179.49
150	25 × 15	1.67	0.62	995.46	30 × 15	1.83	0.68	1145.38
180	25 × 15	1.97	0.73	947.45	30 × 15	1.94	0.72	1102.56
220	30 × 15	2.37	0.88	903.23	35 × 15	2.37	0.88	902.51
270	30 × 15	2.64	0.98	732.56	35 × 15	2.64	0.98	732.56
330	35 × 15	2.89	1.07	601.23				

Rated Voltage (Surge voltage) (V)	315(365)				400(450)			
Items Capacitance (μF)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)	Size D×L(mm)	Ripple Current (40°C, 120Hz) Arms	Ripple Current (105°C, 120Hz) Arms	ESR (Max, mΩ/ 120Hz, 20°C)
39					22 × 15	0.78	0.29	3585.43
47					25 × 15	0.89	0.33	3386.28
56	22 × 15	0.89	0.33	2754.86	30 × 15	1.02	0.38	2842.05
68	25 × 15	1.02	0.38	2453.65	30 × 15	1.13	0.42	2340.51
80	30 × 15	1.16	0.43	1948.54	35 × 15	1.29	0.48	1940.91
100	30 × 15	1.29	0.48	1738.45	35 × 15	1.46	0.54	1591.55
120	35 × 15	1.43	0.53	1652.54				
150	35 × 15	1.56	0.58	1324.57				