

**SP**

High Ripple · Long life Series

- Endurance: 105°C · 8000~10000hours
- Recommended Applications : Applicable for Electronic Ballast
- Corresponding product to RoHS

**SP**

↑ Long Life

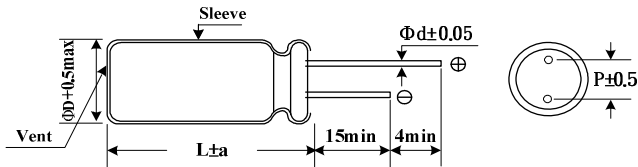
**SG**



**■ SPECIFICATIONS**

Item	Characteristics					
Category Temperature Range	-40~+105°C			-25~+105°C		
Rated Voltage Range	160 ~ 450VDC			500VDC		
Rated Capacitance Range	3.3 ~ 330 μF			10~ 68 μF		
Capacitance Tolerance	± 20 % ( 120Hz , 20°C )			± 20 % ( 120Hz , 20°C )		
Leakage Current (20°C)	I=0.04CV + 100(μ A) ,(After rated voltage applied for 2 minutes) I : Max. leakage current (μ A), C : Nominal capacitance (μ F), V : Rated voltage (V)					
Dissipation Factor(MAX) (tan δ) (120Hz ,20°C)	WV	160	200	400	420~450	500
	tan δ	0.20	0.20	0.24	0.24	0.24
Low Temperature Stability Impedance Ratio (MAX)	WV	160	200	400	420~450	500
	Z(120Hz)					
	Z-25°C / Z+20°C	3	3	5	6	6
	Z-40°C / Z+20°C	6	6	6	8	-
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the max ripple current is applies for 10000 hours (8000 hours for φ 10) at 105°C.					
	Capacitance change	Within ± 20% of initial value				
	D.F. (tan δ)	Not more than 200% of specified value				
Shelf Life	Leakage current	initial specified value or less				
	After placed at 105°C without voltage applied for 1000 hours,the capacitors shall meet the same requirement as Endurance.					

**■ Dimensions [mm]**



ΦD	10	12.5	13	16	18
P	5.0	5.0		7.5	7.5
Φd	0.6	0.6		0.8	0.8
a	1.5(2.0)	2(2.5)		2.0	2.0

Notes : ( ):L ≥ 30mm

**■ Multiplier for Ripple Current**

Freq. (Hz)	120	1K	10K	100K
Coefficient	1.0	1.6	1.8	2.0

■ STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	Ripple current (mA/rms105°C) (120Hz)	Ripple current (mA/rms105°C) (100KHz)	Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size ΦDxL(mm)	Ripple current (mA/rms105°C) (120Hz)	Ripple current (mA/rms105°C) (100KHz)	
160 (200)	33	10x20	250	500	400 (450)	68	12.5x50	400	800	
	47	10x20	290	580				18x32	435	870
		12.5x20	330	660			82	12.5x55	460	920
	68	13x25	360	720	420(470)	27	10x40	200	400	
		16x20	380	760			33	10x45	235	470
	100	13x25	485	970			39	10x50	270	340
		16x20	560	1120			47	12.5x42	310	620
		16x25	560	1120			56	12.5x45	330	660
		18x20	560	1120			68	12.5x50	390	780
	150	10x45	410	820		82	12.5x55	450	900	
		16x25	600	1200	450 (500)	3.3	10x16	50	100	
		16x32	650	1300			4.7	10x20	70	140
	18x25	650	1300			6.8	10x20	75	150	
	180	10x50	470	940				12.5x20	90	180
	220	12.5x45	550	1100			10	10x20	130	260
		16x32	650	1300				12.5x20	155	310
		18x25	650	1300			22	10x40	250	500
	270	12.5x50	640	1280				13x20	215	430
330	12.5x55	740	1480			16x20		240	480	
	18x36	690	1380			16x25		280	560	
200 (250)	22	10x20	220	440			18x20	275	550	
	33	10x20	260	520			27	10x42	270	540
		12.5x20	290	580		33	10*45	300	600	
	47	13x20	330	660			16x32	310	620	
	68	13x25	360	720		18x25	295	590		
	68	16x20	380	760		39	10x50	340	680	
	100	16x25	560	1120			12.5x40	350	700	
		10x45	330	660		47	12.5x45	420	840	
	120	10x50	430	860			16x36	440	880	
	150	12.5x45	510	1020			18x20	350	700	
		16x32	640	1280			18x25	390	780	
	180	12.5x50	590	1180		18x32	440	880		
220	12.5x52	650	1300		56	12.5x50	480	560		
270	12.5x55	750	1500		68	12.5x55	530	1060		
250(300)	82	10x52	390	780	500(550)	10	12.5x20	130	260	
	100	12.5x42	470	940			15	12.5x25	165	330
	120	12.5x45	480	960				16x20	170	340
	150	12.5x50	540	1080			18	12.5x30	195	390
	180	12.5x55	650	1300				16x20	185	370
400 (450)	6.8	10x20	75	150			22	12.5x35	230	460
	10	10x20	90	180				16x25	230	460
	22	13x20	110	220				18x20	225	450
		16x20	150	300			27	12.5x40	270	540
	33	16x20	230	460				16x25	250	500
		16x25	260	520			33	16x30	300	600
	39	10x45	260	520				18x25	295	590
	47	12.5x40	310	620		39	16x36	355	710	
		16x20	280	560			47	16x40	410	820
		16x32	350	700		56	18x30	385	770	
		10x52	340	680			68	18x36	455	910
	56	12.5x45	360	720		68	18x40	515	1030	