

SP Series
Features

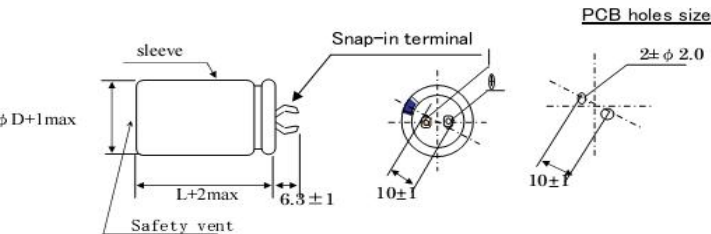
- ◆ High ripple current, smaller size, 3000 hours at 105℃ .
- ◆ Snap-in Terminal Type .
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics											
Temperature Range	-40~+105℃						-25~+105℃					
Rated Voltage Range	10~100Vdc						160~450Vdc					
Capacitance Range	56~56000μF											
Capacitance Tolerance	±20% （120Hz， +20℃ ）											
Leakage Current （+20℃,max. ）	I≤3√CV （μA） （ After 5 minute application of rated voltage at +20℃ ）											
Dissipation Factor(tgδ) 120Hz, +20℃												
	Working Voltage(Vdc)	10	16	25	35	50	63	80	100	160~250	315~400	450
	D.F(%)max.	55	50	45	40	35	30	25	20	15	15	20
	For capacitance>1000μF , Add 2% per another 1000μF .											
Low Temperature Characteristics(120Hz)	Impedance ratio max.											
	Working Voltage(Vdc)		10~100			160~250			315~400		450	
	Z-25℃/ Z+20℃		4			3			5		8	
	Z-40℃/ Z+20℃		15			—			—		—	
Endurance	After applying rated voltage with rated ripple current for 3000 hours at 105℃,the capacitors shall meet the following requirements.											
	Capacitance Change		Within ±20% of the initial value									
	Dissipation Factor		No more than 200% of the specification value									
	Leakage Current		No more than the specification value									
Shelf Life	After storing the capacitors under no load at 105℃ for 1000 hours, the characters shall meet the following requirements.											
	Capacitance Change		Within ±20% of the initial value									
	Dissipation Factor		No more than 200% of the specification value									
	Leakage Current		No more than 200% of the specification value									
Others	JISC-5101(IEC 60384)											

Dimensions



Frequency coefficient

Freq(Hz) WV(V)	50	120	1K	≥10K
10~100	0.90	1.00	1.15	1.25
160~250	0.80	1.00	1.25	1.47
315~450	0.80	1.00	1.30	1.47

SP Series

Case size & Maximum permissible ripple current

Voltage	10V		16V		25V		35V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
3300							22×25	1.45
3900							22×30	1.69
4700					22×25	1.61	22×35	2.02
5600					22×30	1.80	22×35	2.13
6800			22×25	1.75	25.4×25	1.87	25.4×35	2.31
8200			22×30	2.00	25.4×30	2.34	30×30	2.75
10000	22×25	1.77	25.4×25	2.05	30×30	2.61	35×30	3.26
12000	22×30	1.94	22×35	2.31	22×50	2.80	30×45	3.49
	25.4×25	2.10	30×25	2.30	30×30	2.74	35×35	3.40
15000	25.4×30	2.10	30×30	2.57	35×30	3.26	35×40	3.84
18000	22×40	2.41	25.4×40	3.16	30×40	3.56	35×45	4.37
22000	22×45	2.58	25.4×45	3.36	30×45	4.04		
27000	25.4×40	3.07	25.4×50	3.85	35×45	4.74		
33000	25.4×45	3.39	30×45	4.30	35×50	5.50		
39000	30×40	3.70	30×50	4.81				
47000	30×45	4.22	35×45	5.53				
56000	35×45	5.00						

Voltage	50V		63V		80V		100V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
680							22×25	1.09
820							22×30	1.32
1000					22×25	1.19	22×30	1.47
1200			22×25	1.20	22×30	1.44	25.4×30	1.68
1500			22×30	1.47	25.4×25	1.60	30×25	1.95
1800	22×25	1.34	25.4×25	1.52	25.4×30	1.71	30×30	2.20
2200	22×30	1.60	25.4×30	1.75	30×25	1.98	35×30	2.50
2700	22×30	1.70	25.4×35	2.11	25.4×40	2.35	30×40	2.86
	25.4×25	1.71	30×25	2.02	30×30	2.35	35×35	2.89
3300	22×35	1.97	25.4×35	2.27	30×35	2.47	30×45	3.30
	25.4×30	1.88	30×30	2.24	35×30	2.61	35×35	3.25
3900	22×40	2.22	25.4×40	2.51	25.4×50	2.92	30×50	3.60
	25.4×30	2.20	30×35	2.55	30×40	2.82	35×40	3.67
4700	22×45	2.43	25.4×50	2.97	30×45	3.34	35×45	3.80
5600	22×50	2.75	30×45	3.22	30×50	3.80	35×50	4.05
6800	25.4×45	3.30	30×50	3.65	35×50	4.00		
8200	30×40	3.60	35×45	4.04				
10000	30×50	4.05	35×50	4.48				
12000	35×50	4.56						

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Case size & Maximum permissible ripple current

Voltage	160V		200V		250V		315V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
100							22×25	0.56
120					22×25	0.58	25.4×25	0.61
150					22×30	0.65	25.4×30	0.67
180					22×30	0.76	25.4×35	0.80
220			22×25	0.92	25.4×30	0.94	30×30	0.98
270	22×25	0.91	25.4×25	0.97	30×25	1.06	35×25	1.09
330	22×30	1.10	22×35	1.15	25.4×35	1.15	30×40	1.17
	25.4×25	1.11	25.4×25	1.09	30×30	1.18	35×30	1.29
470	22×40	1.40	25.4×35	1.50	30×35	1.46	30×50	1.53
	25.4×35	1.43	30×25	1.44	35×30	1.50	35×40	1.52
560	22×45	1.48	25.4×35	1.53	30×40	1.70	35×45	1.65
680	22×50	1.65	25.4×45	1.77	30×45	1.89	35×50	1.92
	25.4×40	1.62	30×35	1.75	35×35	1.86		
820	25.4×45	1.85	30×40	2.00	35×40	2.04		
1000	25.4×50	2.10	30×45	2.27	35×50	2.28		
1500	30×50	2.70	35×45	2.83				
1800	35×45	3.06	35×50	3.38				
2200	35×50	3.38						

Voltage	350V		400V		450V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
56					22×25	0.42
68			22×25	0.49	25.4×25	0.50
82	22×25	0.52	25.4×25	0.59	25.4×30	0.60
100	22×30	0.56	25.4×25	0.64	30×25	0.64
150	22×40	0.76	25.4×35	0.81	25.4×40	0.81
	25.4×30	0.73	30×25	0.78	30×30	0.79
180	22×45	0.79	22×50	0.89	25.4×45	0.92
	25.4×35	0.77	25.4×40	0.87	30×35	0.90
	30×25	0.74	30×30	0.85	35×30	0.94
220	22×50	0.98	25.4×45	1.04	25.4×50	1.04
	25.4×40	0.96	30×35	1.02	30×40	1.04
	30×30	0.94	35×25	1.00	35×30	1.01
330	30×45	1.24	30×45	1.31	30×50	1.38
	35×35	1.22	35×35	1.29	35×40	1.37
390	30×50	1.38	30×50	1.45	35×45	1.58
470	30×50	1.57	35×45	1.64	35×50	1.76
560	35×45	1.75	35×50	1.88		
680	35×50	1.96				

Size ΦD×L (mm), Ripple Current (A, rms. /105℃ 120Hz) .

Above size is the standard size for our product. If you need special size please contact our sales offices .