

SWF SERIES(screw terminal type (螺釘型) , long life assurance (長壽命保證))

- load life of 5000 hours application of ripple current at +105℃
- high reliability products



◆ SPECIFICATIONS

item	performance characteristics		
operating temperature range	-40 to +105℃		-25 to +105℃
rated working voltage range	10 to 100V		160 to 450 V
nominal capacitance range	330 to 390000µF		
capacitance tolerance	±20% (120Hz, +20℃)		
leakage current	I=0.02CV or 5 (mA) after 5 minutes application of rated working voltage at +20℃, which is smaller		
low temperature characteristics	impedance ratio max. at 120Hz		
	working voltage (V)	10-100	160-450
	Z-25℃/Z+20℃	--	8
high temperature loading	test conditions		
	the following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage with the rated ripple current applied for 5000hours at 105℃		
	post test requirements at +20℃ leakage current: ≤initial specified value cap.change : within ±20% of initial measured value tan δ : ≤200% of initial specified value		
shelf life	at 105℃ no voltage applied after 1000hours the capacitors shall meet the following limits leakage current: ≤initial specified value cap.change : within ±20% of initial measured value tan δ : ≤200% of initial specified value		
others	JIS C-5141 JIS C-5102		

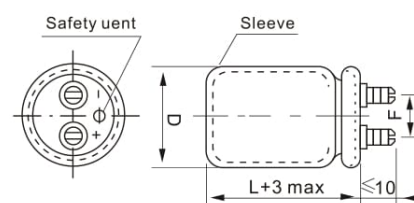
◆Dimension of mounting bracket

voltage (code)		3-leg					2-leg			
symbol	φ D	51	64	76.2	90	100	51	64	76.2	90
P		32.5	38	44.5	50.8	56.3	33.2	41	46.5	53
A		38.5	43	49.2	58.5	62	40	47	53	59
T		7.5	8	7	8	8	6	7	6	6
symbol		5	5	5	5	5	4.5	4.5	4.5	4.5
U		12	14	14	18	16	14	14	14	14
θ°		60	60	60	60	60	30	30	30	30
H		20	25	30	35	36	25	35	35	35
h		15	20	24	25	30	15	20	20	20

ripple current multiplier frequency coefficient

freq. (Hz) Rated voltage	50	120	360	1K	10K	50K
10-50V	0.95	1	1.03	1.05	1.09	1.12
63-80V	0.9	1	1.08	1.1	1.18	1.22
100-250V	0.8	1	1.12	1.22	1.3	1.33
350-450V	0.8	1	1.2	1.5	1.6	1.7

case size table



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◆DIMENSIONS

voltage (code)		10V			16V			25V		
SV		13			20			32		
cap.(μF)	code	case size	tanδ	ripple current	case size	tanδ	ripple current	case size	tanδ	ripple current
12000	129							35*80	0.35	3.3
15000	159				35*50	0.45	2.9	35*80	0.35	3.7
18000	189				35*80	0.45	3.5	35*80	0.35	4
22000	229				35*80	0.45	3.9	35*80	0.35	4.5
27000	279	35*80	0.45	4.3	35*80	0.45	4.3	35*100	0.4	5
33000	339	35*80	0.45	4.7	35*100	0.5	4.8	35*120	0.4	5.9
39000	399	35*80	0.45	5.3	35*100	0.5	5.3	51*80	0.4	6.5
47000	479	35*100	0.45	6.1	35*120	0.5	6.2	51*100	0.4	7.9
56000	569	35*100	0.5	6.2	51*80	0.6	6.3	51*120	0.4	8.8
68000	689	35*120	0.6	6.8	51*100	0.6	7.6	51*120	0.5	9.1
82000	829	51*80	0.6	7.8	51*120	0.7	8.3	63.5*100	0.5	10.6
100000	10T	51*100	0.7	8.5	51*120	0.7	9.2	63.5*120	0.6	11.4
120000	12T	51*100	0.7	9.5	63.5*100	0.8	9.9	76.2*100	0.6	12.8
150000	22T	63.5*100	0.8	11	76.2*100	0.8	12.3	76.2*120	0.75	13.7
180000	27T	63.5*100	0.8	12.2	76.2*120	0.8	14.5	76.2*140	0.76	16.1
220000	22T	76.2*100	1	13.2	76.2*140	1	15.2	90*140	1	16.6
270000	27T	76.2*120	1.2	14.4	90*140	1.2	16.8			
330000	33T	76.2*140	1.2	17						
390000	39T	90*140	1.4	18.6						

maximum allowable ripple current (A rms) at 105℃ 120Hz

case size ϕ D*L(mm)

tanδat 20℃ 120Hz

voltage (code)		35V			50V			63V		
SV		44			63			79		
cap.(μF)	code	case size	tanδ	ripple current	case size	tanδ	ripple current	case size	tanδ	ripple current
2700	278							35*50	0.19	1.9
3300	338							35*50	0.15	2.1
3900	398				35*50	0.2	2	35*80	0.2	2.7
4700	478				35*50	0.25	2.2	35*80	0.2	2.9
5600	568				35*80	0.25	2.8	35*80	0.2	3.2
6800	688				35*80	0.25	3	35*80	0.2	3.5
8200	828	35*80	0.3	3	35*80	0.25	3.3	35*100	0.25	4.2
10000	109	35*80	0.3	3.3	35*80	0.25	3.7	35*120	0.25	4.3
12000	129	35*80	0.3	3.6	35*100	0.25	4.4	51*80	0.25	4.8
15000	159	35*80	0.3	4.1	35*120	0.3	4.7	51*100	0.25	5.9
18000	189	35*100	0.3	4.8	51*80	0.35	4.8	51*120	0.3	6.3
22000	229	35*120	0.35	5.2	51*100	0.35	5.9	51*120	0.3	6.7
27000	279	51*80	0.4	5.9	51*120	0.35	7	63.5*120	0.3	8.8
33000	339	51*100	0.4	6.6	63.5*100	0.4	7.6	76.2*120	0.35	10
39000	399	51*120	0.4	7.8	63.5*120	0.4	8.9	76.2*140	0.35	12.5
47000	479	51*120	0.45	8	63.5*120	0.4	9.8	90*140	0.4	13.8
56000	569	63.5*100	0.45	9.2	76.2*120	0.4	11.9			
68000	689	63.5*120	0.45	11	76.2*140	0.45	13.1			
82000	829	76.2*120	0.5	12.7	90*140	0.5	14.8			
100000	10T	76.2*140	0.6	13.5						
120000	12T	90*140	0.6	16.1						

maximum allowable ripple current (A rms) at 105℃ 120Hz

case size ϕ D*L(mm)

tanδat 20℃ 120Hz

SWF

SERIES(screw terminal type (螺釘型), long life assurance (長壽命保證))

◆DIMENSIONS

voltage (code)		80V			100V			160V		
SV		100			125			200		
cap.(μF)	code	case size	tanδ	ripple current	case size	tanδ	ripple current	case size	tanδ	ripple current
680	687							35*50	0.15	1.1
820	827							35*80	0.15	1.2
1000	108							35*80	0.15	1.3
1200	128				35*50	0.15	1.4	35*80	0.15	1.5
1500	158				35*80	0.15	1.6	35*80	0.15	1.7
1800	188				35*80	0.15	1.8	35*100	0.15	2
2200	228	35*50	0.15	1.9	35*80	0.15	2	35*120	0.15	2.3
2700	278	35*80	0.15	2.2	35*80	0.15	2.4	35*120	0.15	2.7
3300	338	35*80	0.15	2.5	35*100	0.15	2.8	51*100	0.15	3.3
3900	398	35*80	0.15	2.9	35*120	0.15	3.1	51*120	0.15	3.8
4700	478	35*100	0.15	3.1	51*80	0.15	3.6	51*120	0.15	4.2
5600	568	35*100	0.15	3.6	51*100	0.15	4.3	51*120	0.15	4.7
6800	688	35*120	0.2	4.1	51*120	0.15	5	63.5*120	0.15	5.7
8200	828	51*80	0.2	4.8	51*120	0.15	5.5	76.2*100	0.2	6.4
10000	109	51*100	0.2	5.6	63.5*100	0.15	6.4	76.2*120	0.2	6.6
12000	129	51*100	0.2	6.1	63.5*120	0.2	6.6	76.2*140	0.2	7.8
15000	159	51*120	0.2	7.4	76.2*100	0.2	7.5	90*140	0.2	9.5
18000	189	63.5*120	0.25	8	76.2*120	0.25	8			
22000	229	76.2*100	0.25	9.1	76.2*140	0.25	9.4			
27000	279	76.2*120	0.3	9.7	90*140	0.3	10.4			
33000	339	76.2*140	0.3	11.5						
39000	399	90*140	0.3	12.5						

maximum allowable ripple current (A rms) at 105°C 120Hz

case size φ D*L(mm)

tanδ at 20°C 120Hz

voltage (code)		200V			250V			350V		
SV		250			300			300		
cap.(μF)	code	case size	tanδ	ripple current	case size	tanδ	ripple current	case size	tanδ	ripple current
330	337				35*50	0.15	0.7			
390	397				35*80	0.15	0.8			
470	477	35*50	0.15	0.9	35*80	0.15	0.9			
560	567	35*80	0.15	1	35*80	0.15	1			
680	687	35*80	0.15	1.1	35*100	0.15	1.2			
820	827	35*80	0.15	1.3	35*100	0.15	1.4	51*60	0.25	3.3
1000	108	35*80	0.15	1.5	35*120	0.15	1.6			
1200	128	35*100	0.15	1.7	51*80	0.15	1.8			
1500	158	35*120	0.15	1.9	51*100	0.15	2.2	51*85	0.25	5.2
1800	188	35*120	0.15	2.2	51*120	0.15	2.6			
2200	228	51*80	0.15	2.7	51*120	0.15	2.8	51*105	0.25	7
2700	278	51*100	0.15	3.2	63.5*100	0.15	3.3	51*125	0.25	8.4
								63.5*85	0.25	8.1
3300	338	51*120	0.15	3.5	63.5*120	0.15	4	51*145	0.25	9.9
3900	398	63.5*100	0.15	4	76.2*100	0.15	4.4	63.5*125	0.25	11.5
						0.15		76.2*85	0.25	10.8
4700	478	63.5*120	0.15	4.7	76.2*120	0.15	5.2			
5600	568	76.2*100	0.15	5.3	76.2*140	0.15	6.1	63.5*145	0.25	14.7
6800	688	76.2*120	0.15	6.3	90*140	0.15	7.4	76.2*125	0.25	16.8
8200	828	76.2*140	0.2	6.4				76.2*145	0.25	19.6
10000	109	90*140	0.2	7.7				76.2*190	0.25	23
15000	159							90*190	0.25	30.6
22000	229							90*270	0.25	43.5

maximum allowable ripple current (A rms) at 105°C 120Hz

case size φ D*L(mm)

tanδ at 20°C 120Hz

SWF SERIES(screw terminal type (螺釘型) , long life assurance (長壽命保證))

◆DIMENSIONS

voltage (code)		400V			450V						
SV		450			500						
cap.(μF)	code	case size	tanδ	ripple current	case size	tanδ	ripple current				
560	567				51*60	0.25	2.6				
680	687	51*60	0.25	3							
820	827										
1000	108				51*85	0.25	4				
1200	128	51*85	0.25	4.7	51*105	0.25	4.8				
1500	158										
1800	188	51*105	0.25	6.3	51*125	0.25	6.4				
					63.5*85	0.25	6.2				
2200	228	51*125	0.25	7.5	51*145	0.25	7.6				
		63.5*85	0.25	7.3	63.5*105	0.25	7.5				
2700	278	51*145	0.25	8.9	63.5*125	0.25	8.9				
		63.5*105	0.25	8.8	76.2*85	0.25	8.4				
3300	338	63.5*125	0.25	10.5	63.5*145	0.25	10.6				
		76.2*85	0.25	9.9	76.2*105	0.25	10.2				
3900	398				76.2*125	0.25	11.9				
4700	478	63.5*145	0.25	13.4	76.2*145	0.25	14				
		76.2*125	0.25	13.9							
5600	568				90*125	0.25	14.2				
6800	688	76.2*145	0.25	17.9	76.2*190	0.25	17.3				
		90*125	0.25	17.2	90*145	0.25	16.7				
8200	828	76.2*190	0.25	20.8							
		90*145	0.25	20.1							
10000	109				90*190	0.25	22.8				
12000	129	90*190	0.25	27.4							
15000	159				90*270	0.25	22.8				
22000	229	90*270	0.25	39.4							

maximum allowable ripple current (A rms) at 105℃ 120Hz

case size $\varnothing$ D*L(mm)

tanδat 20℃ 120Hz