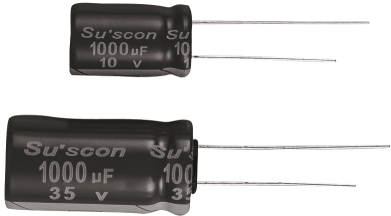


SDN series

SDN

- High frequency and low impedance, high ripple current resistance.
- Suitable for return-circuit of switching power source.
- 高頻低阻抗、耐高紋波。
- 適用於開關電源回路。



SPECIFICATIONS

Items 項目	Characteristics 特 性										
Capacitance Tolerance 靜電容量誤差	±20% (120Hz, 20 °C)										
Operating temperature Range 適用溫度範圍	-55 ~ +105°C						-40 ~ +105°C				
Rated Voltage Range 工作電壓範圍	6.3~100V						160~400V				
Leakage Current 洩漏電流	WV ≤ 100V I ≤ 0.01CV or 3(μA) (After 2 minutes application of DC working voltage, at 20°C) WV > 100V I ≤ 0.03CV +20 (μ A) (After 5 minutes application of DC working voltage, at 20°C)										
Dissipation Factor 散逸因素 (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C										
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160~250	400
	tan δ (MAX)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.20	0.24
	When nominal capacitance exceeds 1000uF, add 0.02 to the value above for each 1000uF increase. (20°C、120Hz)										
Low Temperature Stability 低溫特性 Impedance Ratio (MAX) 阻抗比率（最大值）	Measurement Frequency: 120Hz.										
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160~250	400
	Z (-25°C) / Z (20°C)	4	3	2	2	2	2	2	2	3	6
	Z (-40°C) / Z (20°C)	—	—	—	—	—	—	3	3	6	—
	Z (-55°C) /Z (20°C)	8	6	4	3	3	3	—	—	—	—
Load Life 負荷壽命	2000 hours, with application of working voltage at 105°C.										
	Capacitance Change	Within ± 20% of Initial Value									
	tan δ	200% or less of Initial Specified Value									
	Leakage Current	Initial Specified Value or less									
Shelf Life 放置壽命	1000hours, no voltage applied, at 105°C. After Test: U _R to be applied for 30 minutes, 24 to 48 hours before measurement.										
	Capacitance Change	Within ± 20% of Initial Value									
	tan δ	200% or less of Initial Specified Value									
	Leakage Current	Initial Specified Value or less									
Standards 參照標準	JIS C 5141 and JIS C 5102										

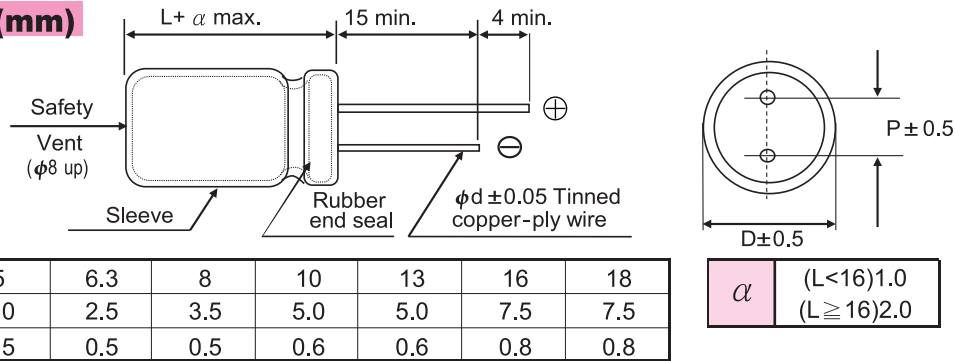
PERMISSIBLE RIPPLE CURRENT

Frequency Coefficient

WV (V)	Capacitance (μF)	Frequency (Hz)				
		50	120	1K	10K	100K
6.3~100	47~100	0.45	0.55	0.75	0.90	1.00
	220~1000	0.60	0.70	0.85	0.95	1.00
	1500~15000	0.70	0.80	0.95	0.98	1.00
160~400	2.2~330	0.55	0.65	0.80	0.90	1.00

SDN series

DIMENSIONS (mm)



STANDARD RATINGS

D×L (mm); R.C.: (mA rms) at 105°C, 100KHZ. IMP (Ω max) at 20°C, 100KHZ.

Cap (μF)	WV(V) (Code) Item	6.3 (0J)			10 (1A)			16 (1C)			25 (1E)		
		D×L	R.C.	IMP	D×L	R.C.	IMP	D×L	R.C.	IMP	D×L	R.C.	IMP
4.7											5×11	50	4.500
10											5×11	80	4.500
22											5×11	110	2.400
47					5×11	140	1.950	5×11	170	1.950	5×11	170	1.950
68					5×11	160	1.950	5×11	210	1.650	6.3×11	210	1.650
100					5×11	180	1.950	6.3×11	270	0.900	6.3×11	270	0.900
220		6.3×11	270	0.900	6.3×11	270	0.900	8×12	440	0.600	8×12	440	0.600
330		6.3×11	320	0.900	8×12	440	0.600	8×12	440	0.600	10×13	650	0.300
470		8×12	440	0.600	8×12	440	0.600	10×13	650	0.300	10×16	800	0.225
680		8×12	650	0.300	10×13	650	0.300	10×16	800	0.225	10×20	1050	0.174
1000		10×13	650	0.300	10×16	800	0.225	10×20	1050	0.174	13×21	1350	0.165
1500		10×13	1050	0.174	10×20	1050	0.174	13×21	1350	0.165	16×26	2050	0.090
2200		10×25	1350	0.165	13×21	1350	0.165	13×25	1650	0.129	16×26	2050	0.090
3300		13×21	1350	0.165	13×25	1650	0.129	16×26	2050	0.090	16×32	2550	0.081
4700		16×26	2050	0.090	13×35	2050	0.090	16×32	2550	0.081	18×35	2950	0.075
6800		16×26	2050	0.090	16×32	2550	0.081	18×35	2950	0.075	18×40	3300	0.069
10000		16×32	2550	0.081	18×35	2950	0.075	18×40	3300	0.069			
15000		18×35	2950	0.075	18×40	3300	0.069						

Cap (μF)	WV(V) (Code) Item	35 (1V)			50 (1H)			63 (1J)			100 (2A)		
		D×L	R.C.	IMP	D×L	R.C.	IMP	D×L	R.C.	IMP	D×L	R.C.	IMP
0.47					5×11	25	22.50				5×11	20	129
1					5×11	40	15.90				5×11	30	132
2.2					5×11	55	13.50				5×11	44	29.40
3.3					5×11	65	11.70				5×11	58	19.80
4.7		5×11	85	6.000	5×11	90	6.900	5×11	65	13.48	5×11	74	13.81
10		5×11	100	3.600	5×11	110	4.200	5×11	110	6.760	6.3×11	130	5.415
22		5×11	120	3.000	5×11	140	3.600	6.3×11	250	2.340	8×12	230	4.080
33		5×11	210	1.290	6.3×11	240	1.440	6.3×11	250	2.193	10×13	320	1.380
47		6.3×11	270	0.900	6.3×11	240	1.440	8×12	405	0.972	10×16	420	0.984
68		8×12	360	0.900	8×12	300	0.900	10×13	406	0.918	10×20	420	0.864
100		8×12	440	0.600	8×12	400	0.750	10×13	535	0.828	13×21	580	0.624
220		10×13	650	0.300	10×16	600	0.510	10×20	880	0.426	16×26	880	0.312
330		10×16	800	0.225	10×20	800	0.450	13×21	1080	0.255	16×32	930	0.264
470		10×20	1050	0.174	13×21	1050	0.270	13×25	1350	0.210	16×36	1230	0.216
680		13×21	1350	0.165	13×25	1150	0.210	16×26	1580	0.165	18×35	1410	0.192
1000		13×25	1650	0.129	16×26	1550	0.144	16×32	2030	0.129	18×40	1520	0.141
1500		16×26	2050	0.090	16×32	1950	0.129	18×35	2450	0.099			
2200		16×32	2550	0.081	18×35	2250	0.120	18×40	2750	0.096			
3300		18×35	2950	0.075									
4700		18×40	3300	0.069									

※ 13mm may be replaced by 12.5mm upon customer's request.

SDN series

SDN

STANDARD RATINGS

D×L (mm); R.C.: (mA rms) at 105°C, 100KHz; IMP (Ω max) at 20°C, 100KHz.

Cap (μF)	WV(V) (Code)	160 (2C)		200 (2D)		250 (2E)		400 (2G)	
Item		D×L	R.C.	D×L	R.C.	D×L	R.C.	D×L	R.C.
2.2						8×12	105	8×12	80
3.3		8×12	104	8×12	113	8×12	122	10×13	110
4.7		8×12	112	8×12	126	10×13	140	10×16	160
10		10×13	180	10×13	210	10×16	300	10×20	195
33		10×20	570	10×25	600	13×21	620	13×25	580
22		10×16	250	10×20	465	13×21	485	13×25	350
47		13×21	730	13×21	730	13×25	810	16×26	720
68		13×25	850	13×25	985	16×26	1010	16×32	1200
100		16×26	1285	16×26	1285	16×32	1405	18×35	1250
150		16×32	1310	16×32	1310	18×32	1455		
220		16×32	1450	18×32	1510	18×40	1490		
330		18×35	1850						

※ 13mm may be replaced by 12.5mm upon customer's request.