

# SGN series

- Anhydrous product.
- High ripple current, ultra low impedance at high frequency range.
- Long life.
- RoHS Compliance
- 無水系產品。
- 高紋波電流、高頻超低阻抗。
- 長壽命產品。



## 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							
Rated Voltage Range 額定電壓範圍	6.3 ~ 50VDC							
Leakage Current 洩漏電流	I ≤ 0.01CV or 3 (μA) which is greater.( After 2 minutes application of DC rated 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
	tan δ(Max)	0.24	0.20	0.16	0.15	0.12	0.10	0.09
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.							
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	
	Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2
	Z(-55°C)/Z(20°C)	3	3	3	3	3	3	3
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 5,000 hours ( φ D≤6.3:2,000 hours; φ D=8:3,000 hours; φ D=10:4,000 hours) at 105°C.							
	Capacitance Change	Within ± 25% 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	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.							
	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 5101-4 (IEC 60384)							

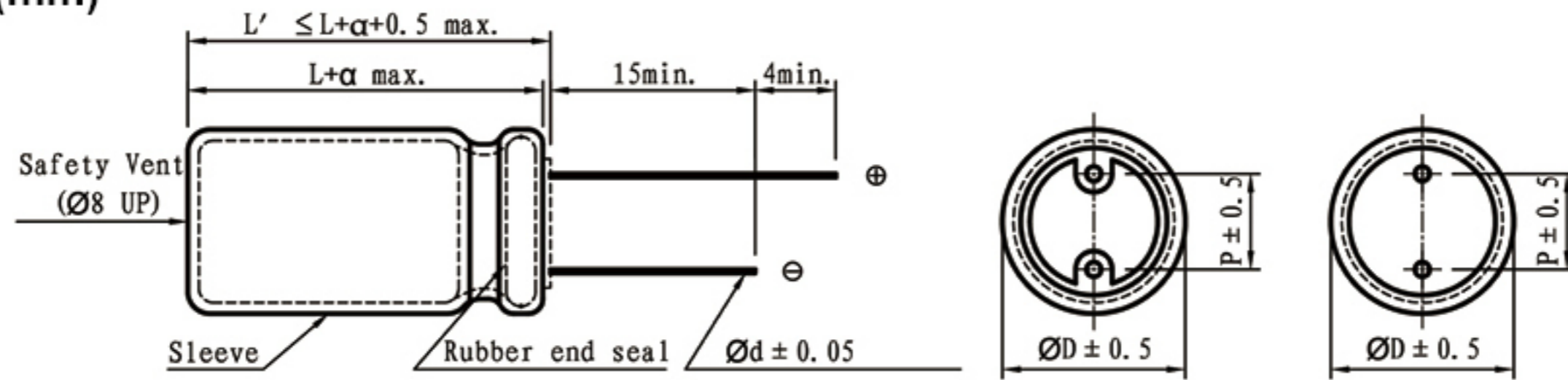
## Frequency Coefficient of Permissible Ripple Current

Capacitance (μF)	Frequency (Hz)				
	50	120	1K	10K	100K
≤ 33	0.45	0.55	0.75	0.90	1.00
47 ~ 330	0.60	0.70	0.85	0.95	1.00
470 ~ 1000	0.65	0.75	0.90	0.98	1.00
1200 ~ 6800	0.75	0.80	0.95	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

# SGN series

## DIMENSIONS(mm)



$\alpha$	(L < 16) 1.0
	(L ≥ 16) 2.0

## STANDARD RATINGS

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

Cap (μF)	V Item	6.3			10			16		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
56								5x11	250	0.500
100					5x11	250	0.500			
120								6.3x11	405	0.210
150		5x11	250	0.845						
220					6.3x11	405	0.380	8x12	700	0.210
330		6.3x11	405	0.230				8x12	760	0.120
470					8x12	760	0.210	8x16	995	0.093
560		8x12	760	0.130				10x13	1030	0.087
680					8x16	995	0.093	8x20	1250	0.068
820		8x16	995	0.099	10x13	1030	0.087	10x16	1430	0.062
1000		10x13	1030	0.093	8x20	1250	0.068	10x20	1820	0.038
1200					10x16	1430	0.062			
1500		8x20	1250	0.072	10x20	1820	0.038	10x25	2150	0.036
2200		10x16	1430	0.066						
2700		10x20	1820	0.040	10x25	2150	0.036	13x21	2360	0.035
3300		10x25	2150	0.038	13x21	2360	0.035	13x25	2770	0.030
3900								13x30	3140	0.027
4700		13x21	2360	0.037	13x25	2770	0.030	13x35	3400	0.024
5600		13x25	2770	0.032	13x30	3290	0.027	16x26	3460	0.026
6800		13x30	3290	0.027	13x35	3400	0.024			
5600		13x35	3140	0.026	16x26	3460	0.026			
6800		16x26	3460	0.027						

Cap (μF)	V Item	25			35			50		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
22								5x11	238	1.310
33					5x11	250	0.330			
47		5x11	250	0.500				6.3x11	385	1.140
56					6.3x11	405	0.230	6.3x11	385	0.540
68										
100		6.3x11	405	0.380				8x12	724	0.340
120								8x16	950	0.230
150					8x12	760	0.130	10x13	979	0.230
180								8x20	1190	0.180
220		8x12	760	0.150	8x16	995	0.099	10x16	1370	0.160
270					10x13	1030	0.093			
330					8x20	1250	0.100	10x20	1580	0.120
470		8x16	995	0.093	10x16	1430	0.100	10x25	1870	0.110
560		10x13	1030	0.087						
680		8x20	1250	0.068	10x20	1820	0.085	13x21	2050	0.110
820		10x16	1430	0.062						
1000		10x25	2150	0.053	10x25	2150	0.053	13x25	2410	0.088
1200		10x20	1820	0.058	13x21	2360	0.051	13x30	2860	0.081
1500		10x25	2150	0.036	13x21	2450	0.048	13x35	2960	0.074
1800		13x21	2360	0.035	13x25	2770	0.044	16x26	3010	0.081
2200					13x30	3140	0.037			
2700		13x25	2770	0.030	13x35	3400	0.035			
1800		13x30	3140	0.026	16x26	3460	0.037			
2200		13x35	3400	0.024						
2700		16x26	3460	0.026						

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