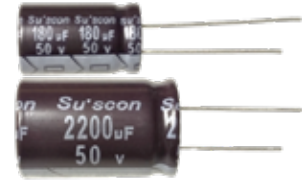


# SG series

- High ripple current Very Low impedance at High frequency range.
- 2000~5000 hours Long life at 105°C .
- RoHS Compliance
- 高紋波電流、高頻超低阻抗。
- 105°C 2000~5000小時長壽命產品。



## SPECIFICATIONS

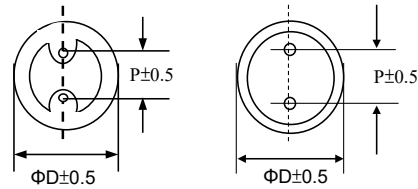
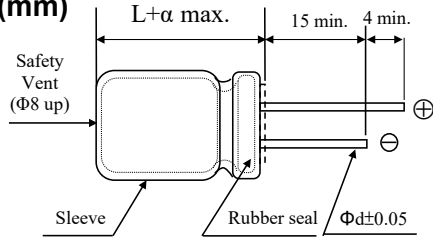
Items 項目	Characteristics 特性								
Capacitance Tolerance 靜電容量誤差	±20% (120Hz , 20°C)								
Operating Temperature Range 適用溫度範圍	- 40 ~ +105°C								
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC								
Leakage Current 洩漏電流	I≤0.01CV or 3 (µA) which is greater. ( After 2 minutes application of DC rated voltage, 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	63~80	100
	tan δ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
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	63~80	100
	Z(-25°C)/Z(20°C)	2	2	2	2	2	2	2	2
	Z(-40°C)/Z(20°C)	3	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 (ΦD≤6.3:2,000 hours;ΦD=8:3,000 hours;ΦD=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 1,000hours 105°C without voltage applied. Before the measurement. The Capacitance 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	IEC 60384-4(JIS C5101-4)								

## Frequency Coefficient of Permissible Ripple Current

Capacitance (µF)	Frequency (Hz)				
	50	120	1K	10K	100K
≤ 33	0.35	0.40	0.75	0.90	1.00
47 ~ 330	0.45	0.50	0.85	0.95	1.00
470 ~ 1000	0.50	0.60	0.90	0.95	1.00
1200 ~ 6800	0.65	0.80	0.90	0.95	1.00

# SG series

**DIMENSIONS(mm)**



ΦD	5	6.3	8	10	12.5	16
P	2.0	2.5	3.5	5.0	5.0	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8

$\alpha$	(L < 20)	1.5
	(L ≥ 20)	2.0

**STANDARD RATINGS**

DxL(mm), R.C : (mA rms) at 105°C 100kHz , IMP:(Ω max) at 20°C,100kHz.

Cap (μF)	V	6.3			10			16		
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.
33								5x7	210	0.450
56					5x7	210	0.440	5x11	250	0.300
68		5x7		310					300	0.240
100					5x11	250	0.300			
120						300	0.230	6.3x11	405	0.130
								8x7	380	0.150
150		5x11		250						
		6.3x7		300						
180					8x7	380	0.150			
220		8x7		380	6.3x11	405	0.130			
330		6.3x11		405	8x11.5	600	0.085	8x11.5	760	0.072
470								8x15	995	0.056
					8x11.5	760	0.072	10x12.5	1030	0.053
560		8x11.5		760						
680					8x15	995	0.056	8x20	1250	0.041
								10x16	1430	0.038
820		8x15		995						
1000		10x12.5		1030	8x20	1250	0.041	10x20	1820	0.023
					10x16	1430	0.038			
1200		8x20		1250	10x20	1820	0.023	10x25	2150	0.022
		10x16		1430						
1500		10x20		1820	10x25	2150	0.022	12.5x20	2360	0.021
2200		10x25		2150	12.5x20	2360	0.021	12.5x25	2770	0.018
								12.5x30	3140	0.016
2700								16x20	3290	0.018
3300		12.5x20		2360	12.5x25	2770	0.018	12.5x35	3400	0.015
3900		12.5x25		2770	12.5x30	3290	0.016	16x25	3460	0.016
					16x20	3140	0.018			
4700		12.5x30		3290	12.5x35	3400	0.015			
5600		12.5x35		3350						
		16x20		3400	16x25	3460	0.016			
6800		16x25		3460						

Cap (μF)	V	25			35			50		
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.
10								5x7	210	1.5
22								5x11	238	0.34
								6.3x7	300	0.26
27		5x7		210	5x7	210	0.470		238	0.34
33					5x11	250	0.300	8x7	380	0.17
39					6.3x7	300	0.250			
47		5x11		250						
56		6.3x7		300	6.3x11	405	0.130	6.3x11	385	0.14
					8x7	380	0.150			
100		6.3x11		405				8x11.5	724	0.074
		8x7		380						
120					8x11.5	760	0.072	8x15	950	0.061
150								10x12.5	979	0.061
180								8x20	1190	0.046
220		8x11.5		760	8x15	995	0.056	10x16	1370	0.042
					10x12.5	1030	0.053			

SG

**SG** series

**STANDARD RATINGS**

DxL(mm), R.C : (mA rms) at 105°C 100kHz , IMP:(Ω max) at 20°C,100kHz.

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
270					8x20	1250	0.041	10x20	1580	0.030
330		8x15	995	0.056	10x16	1430	0.038	10x25	1870	0.028
		10x12.5	1030	0.053						
470		8x20	1250	0.041	10x20	1820	0.023	12.5x20	2050	0.027
		10x16	1430	0.038						
560						2150	0.022	12.5x25	2410	0.023
680		10x20	1820	0.023	12.5x20	2360	0.021	12.5x30	2860	0.021
820		10x25	2150	0.022	12.5x20	2450	0.02	12.5x35	2960	0.025
								16x20	2730	0.023
1000		12.5x20	2360	0.021	12.5x25	2770	0.018	16x25	3010	0.021
1200		12.5x20	2360	0.021	12.5x30	3140	0.016			
					16x20	3290	0.018			
1500		12.5x25	2770	0.018	12.5x35	3400	0.015			
1800		12.5x30	3140	0.016	16x25	3460	0.016			
		16x20	3290	0.018						
2200		12.5x35	3400	0.015						
2700		16x25	3460	0.016						

Cap (μF)	V Item	63			80			100		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
6.8								5x11	125	1.400
15		5x11	165	0.880				6.3x11	205	0.570
27								8x11.5	355	0.360
33		6.3x11	265	0.350						
39								8x15	450	0.250
47								10x12.5	480	0.170
56		8x11.5	500	0.220				8x20	565	0.190
68					10x12.5	480	0.170	10x16	600	0.110
82		8x15	665	0.160				10x20	800	0.084
		10x12.5	690	0.110						
100					10x16	600	0.110	12.5x16	750	0.110
120		8x20	820	0.120	10x20	800	0.084	10x25	900	0.069
		10x16	950	0.076						
150					10x25	900	0.069	12.5x20	1100	0.062
					12.5x16	750	0.110			
180		10x20	1150	0.056						
		12.5x16	1150	0.072						
220		10x25	1350	0.046	12.5x20	1100	0.062	12.5x25	1250	0.047
								16x20	1350	0.048
270		12.5x20	1500	0.041						
330					12.5x25	1250	0.047	12.5x30	1500	0.042
					16x20	1350	0.048	12.5x35	1650	0.036
								18x20	1500	0.045
390		12.5x25	1900	0.031	12.5x30	1500	0.042	12.5x40	1700	0.032
470		12.5x30	2300	0.028	12.5x35	1650	0.036	16x31.5	1850	0.032
		16x20	2000	0.032	16x25	1700	0.038	18x25	1750	0.036
560					18x20	1500	0.045			
		12.5x35	2500	0.024	12.5x40	1800	0.032	16x35.5	2000	0.029
680								18x31.5	1900	0.030
		12.5x40	2800	0.021	16x31.5	1850	0.032	16x40	2200	0.027
		16x25	2600	0.025	18x25	1750	0.036	18x35.5	2200	0.027
820		18x20	2500	0.030						
		16x31.5	2850	0.021	16x35.5	2000	0.029	18x40	2700	0.026
1000		18x20	2800	0.024	18x31.5	1900	0.030			
		16x35.5	2900	0.019	16x40	2200	0.027			
1200					18x35.5	2200	0.027			
		16x40	3400	0.018	18x40	2700	0.026			
1500		18x31.5	3300	0.020						
1800		18x35.5	3400	0.018						
		18x40	3400	0.017						

SG