

SG series

- Enabled high ripple current lower impedance at high frequency range.
- Long life.
- RoHS Compliance.
- 耐高紋波電流、超低阻抗於高頻。
- 長壽命品。



SG

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 工作電壓範圍	6.3 ~ 50V						
Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3\mu A$ (After 2 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
	tan δ (Max)	0.15	0.12	0.10	0.09	0.08	0.07
When nominal capacitance exceeds 1000 μF , add 0.02 to the value above for each 1000 μF 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
	Z (-25°C) / Z (20°C)	2	2	2	2	2	2
	Z (-40°C) / Z (20°C)	3	3	3	3	3	3
Load Life 負荷壽命	5,000hours, with application of working voltage at 105°C ($\phi D \leq 6.3mm$, 2000hrs; $\phi D = 8mm$, 3000hrs; $\phi D = 10mm$, 4000hrs)						
	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	1,000hours, no voltage applied, at 105°C. After Test: U_R to be applied for 30 minutes, 24 to 48hours 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 5101-4-1 and JIS C 5101-2						

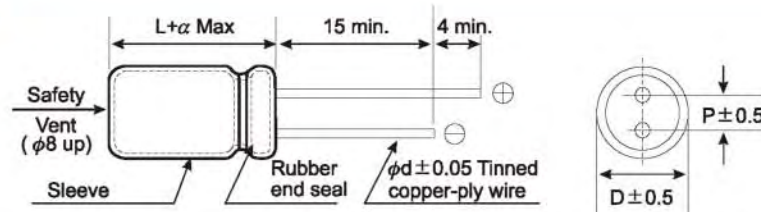
PERMISSIBLE RIPPLE CURRENT

Frequency Coefficient

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

SG series

DIMENSIONS (mm)



ϕ D	5	6.3	8	10	13	16
P	2.0	2.5	3.5	5.0	5.0	7.5
ϕ d	0.5	0.5	0.5	0.6	0.6	0.8

α	(L < 16)	1.0
	(L \geq 16)	2.0

STANDARD RATINGS

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

Cap (μ F)	WV(V)/(Code) Item	6.3 (0J)			10 (1A)			16 (1C)		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
56								5x11	250	0.300
100					5x11	250	0.300			
120								6.3x11	405	0.130
150		5x11	250	0.300						
220					6.3x11	405	0.130			
330		6.3x11	405	0.130				8x12	760	0.072
470					8x12	760	0.072	8x16	995	0.056
560		8x12	760	0.072				10x13	1030	0.053
680					8x16	995	0.056	8x20	1250	0.041
820		8x16	995	0.056	10x13	1030	0.053	10x16	1430	0.038
1000		10x13	1030	0.053	8x20	1250	0.041			
1200		8x20	1250	0.041	10x16	1430	0.038	10x20	1820	0.023
1500		10x16	1430	0.038	10x20	1820	0.023	10x25	2150	0.022
2200		10x20	1820	0.023	10x25	2150	0.022	13x21	2360	0.021
2700		10x25	2150	0.022	13x21	2360	0.021	13x25	2770	0.018
3300								13x30	3140	0.016
3900		13x21	2360	0.021	13x25	2770	0.018	16x22	3290	0.018
4700		13x25	2770	0.018	13x30	3290	0.016	13x35	3400	0.015
5600		13x30	3290	0.016	16x22	3140	0.018			
6800		13x35	3140	0.015	16x26	3400	0.015			
		16x22	3400	0.018						
		16x26	3460	0.016						

Cap (μ F)	WV(V)/(Code) Item	25 (1E)			35 (1V)			50 (1H)		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
22								5x11	238	0.340
33					5x11	250	0.300			
47		5x11	250	0.300						
56					6.3x11	405	0.130	6.3x11	385	0.140
68										
100		6.3x11	405	0.130				8x12	724	0.074
120								8x16	950	0.061
150					8x12	760	0.072	10x13	979	0.061
180								8x20	1190	0.046
220		8x12	760	0.072	8x16	995	0.056	10x16	1370	0.042
270					10x13	1030	0.053	10x20	1580	0.030
330		8x16	995	0.056	8x20	1250	0.041	10x25	1870	0.028
470		10x13	1030	0.053	10x16	1430	0.038			
560		8x20	1250	0.041	10x20	1820	0.023	13x21	2050	0.027
680		10x16	1430	0.038	10x25	2150	0.022	13x25	2410	0.023
820					13x21	2360	0.021	13x30	2860	0.021
1000		10x20	1820	0.023	13x21	2450	0.020	13x35	2960	0.019
1200		10x25	2150	0.022	13x21	2450	0.020	16x22	2730	0.023
1500		13x21	2360	0.021	13x25	2770	0.018	16x26	3010	0.021
1800		13x25	2770	0.018	13x30	3140	0.016			
2200		13x30	3140	0.016	16x22	3290	0.018			
2700		16x22	3290	0.018	13x35	3400	0.015			
		13x35	3400	0.015	16x26	3460	0.016			
		16x26	3460	0.016						

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