

Aluminum Electrolytic Capacitor

SG series

- High ripple current, ultra low impedance at high frequency range.
- Long life.
- RoHS Compliance
- 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℃)						
Operating Temperature Range 適用溫度範圍	-40 ~ +105℃						
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 ℃)						
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃						
	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 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℃)/Z(20℃)	2	2	2	2	2	2
	Z(-40℃)/Z(20℃)	3	3	3	3	3	3
Load Life 負荷壽命	5000hours,with application of rated voltage at 105℃ (φ D ≤ 6.3mm, 2,000 hrs ; φ D = 8mm, 3,000 hrs ; φ D = 10mm, 4,000 hrs)						
	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℃ after exposing them for 1,000 hours 105℃ 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

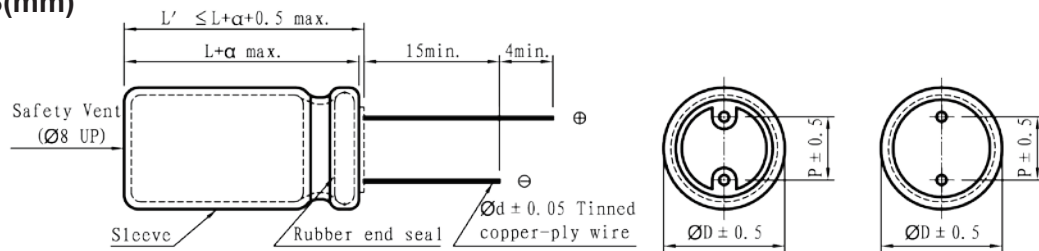
Capacitance (μF)	Frequency (Hz)				
	50	120	1K	10K	100K
≤ 33	0.45	0.55	0.75	0.90	1.00
47 ~ 330	0.60	0.70	0.85	0.95	1.00
470 ~ 1000	0.65	0.75	0.90	0.98	1.00
1200 ~ 6800	0.75	0.80	0.95	1.00	1.00

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.

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DIMENSIONS(mm)



ϕD	5	6.3	8	10	13	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

α	(L < 16) 1.0 (L $\geq$ 16) 2.0
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STANDARD RATINGS

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

Cap (μF)	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	600	0.085	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					10x13	1030	0.053	10x16	1430	0.038
1000		8x16	995	0.056						
					8x20	1250	0.041			
					10x16	1430	0.038	10x20	1820	0.023
1200		8x20	1250	0.041						
		10x16	1430	0.038	10x20	1820	0.023	10x25	2150	0.022
1500		10x20	1820	0.023	10x25	2150	0.022	13x21	2360	0.021
2200		10x25	2150	0.022	13x21	2360	0.021	13x25	2770	0.018
2700								13x30	3140	0.016
								16x22	3290	0.018
3300		13x21	2360	0.021	13x25	2770	0.018	13x35	3400	0.015
3900		13x25	2770	0.018	13x30	3290	0.016			
					16x22	3140	0.018	16x26	3460	0.016
4700		13x30	3290	0.016	13x35	3400	0.015			
5600		13x35	3140	0.015						
		16x22	3400	0.018	16x26	3460	0.016			
6800		16x26	3460	0.016						

Cap (μF)	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			
					10x13	1030	0.053	10x16	1370	0.042
270					8x20	1250	0.041	10x20	1580	0.030
330		8x16	995	0.056				10x25	1870	0.028
		10x13	1030	0.053	10x16	1430	0.038			
470		8x20	1250	0.041				13x21	2050	0.027
		10x16	1430	0.038	10x20	1820	0.023			
560					10x25	2150	0.022	13x25	2410	0.023
680		10x20	1820	0.023	13x21	2360	0.021	13x30	2860	0.021
820		10x25	2150	0.022	13x21	2450	0.020	13x35	2960	0.019
1000		13x21	2360	0.021	13x25	2770	0.018	16x22	2730	0.023
					13x30	3140	0.016	16x26	3010	0.021
1200		13x21	2360	0.021	16x22	3290	0.018			
					13x35	3400	0.015			
1500		13x25	2770	0.018						
1800		13x30	3140	0.016						
		16x22	3290	0.018	16x26	3460	0.016			
2200		13x35	3400	0.015						
2700		16x26	3460	0.016						

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