

SGV SERIES

105°C Standard, Lead Free Reflow Soldering.

◆FEATURES

- Load Life : 105°C 2000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- RoHS compliance.



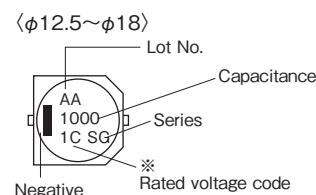
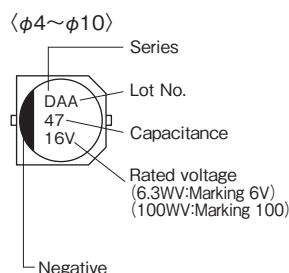
◆SPECIFICATIONS

Items	Characteristics																																						
Category Temperature Range	-55~+105℃					-40~+105℃																																	
Rated Voltage Range	6.3~50V.DC					63 , 100V.DC																																	
Capacitance Tolerance	±20% (20℃,120Hz)																																						
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(V)																																						
Dissipation Factor(MAX) (tanδ)	<table><tr><th colspan="2">Rated Voltage (V)</th><th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>100</th></tr><tr><td rowspan="2">tanδ</td><td>φ4,φ5,φ6.3×6.1</td><td>0.30</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.14</td><td>0.12</td><td>—</td><td>—</td></tr><tr><td>φ6.3×8,φ8~φ18</td><td>0.35</td><td>0.26</td><td>0.24</td><td>0.18</td><td>0.14</td><td>0.12</td><td>0.12</td><td>0.10</td></tr></table> When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.										Rated Voltage (V)		6.3	10	16	25	35	50	63	100	tanδ	φ4,φ5,φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	—	—	φ6.3×8,φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10
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Endurance	After applying rated voltage with rated ripple current for 2000 hours at 105℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td>Within ±25% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td>Not more than 200% of the specified value.</td></tr><tr><td>Leakage Current</td><td>Not more than the specified value.</td></tr></table>										Capacitance Change	Within ±25% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																							
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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><th>Rated Voltage (V)</th><th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>100</th></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>8</td><td>8</td><td>4</td><td>4</td><td>3</td><td>3</td><td>5</td><td>5</td></tr></table> (120Hz)										Rated Voltage (V)	6.3	10	16	25	35	50	63	100	Z(-25℃)/Z(20℃)	4	3	2	2	2	2	2	2	Z(-40℃)/Z(20℃)	8	8	4	4	3	3	5	5		
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Z(-40℃)/Z(20℃)	8	8	4	4	3	3	5	5																															

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		60(50)	120	500	1k	10k≤
Coefficient	0.47~1μF	0.50	1.00	1.20	1.30	1.50
	2.2~4.7μF	0.65	1.00	1.20	1.30	1.50
	10~47μF	0.80	1.00	1.20	1.30	1.50
	100~1000μF	0.80	1.00	1.10	1.15	1.20
	2200~6800μF	0.80	1.00	1.05	1.10	1.15

◆MARKING



※Voltage code

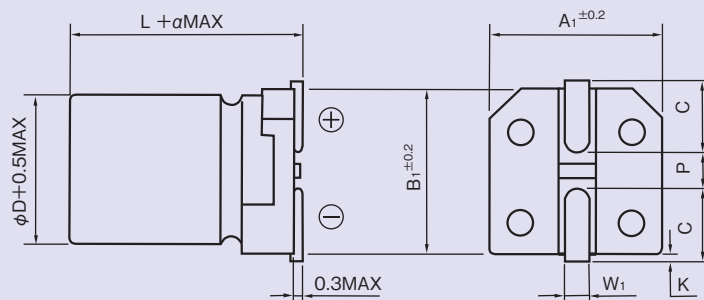
Rated Voltage (V)	6.3	10	16	25	35	50	63	100
Rated Voltage code	0J	1A	1C	1E	1V	1H	1J	2A

◆PART NUMBER

□□□ SGV □□□□□ M □□□ DxL
 Rated Voltage Series Capacitance Capacitance Tolerance Option Case Size

◆ DIMENSIONS

(mm)



ϕD	L	A ₁	B ₁	C	W ₁	P	K	α
4	6.1	4.3	4.3	1.8	0.5~0.8	1.0	0.5 MAX	0
5	6.1	5.3	5.3	2.2	0.5~0.8	1.3	0.5 MAX	0
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8	0.5 MAX	0
8	6.5	8.3	8.3	3.4	0.5~0.8	2.2	0.5 MAX	0
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5 MAX	0
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5 MAX	0
12.5	13.5	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
12.5	16	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
16	16.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
16	21.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
18	16.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5
18	21.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5

◆STANDARD SIZE

Size $\phi D \times L$ (mm), Ripple Current (mA r.m.s./105°C, 120Hz)[illegible]