

SGV SERIES

105°C Long Life, 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 3 μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)																																						
Dissipation Factor(MAX) (tan δ)	<table><tr><td colspan="2">Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td rowspan="2">tan δ</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 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF.										Rated Voltage (V)		6.3	10	16	25	35	50	63	100	tan δ	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 hrs 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><td>Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></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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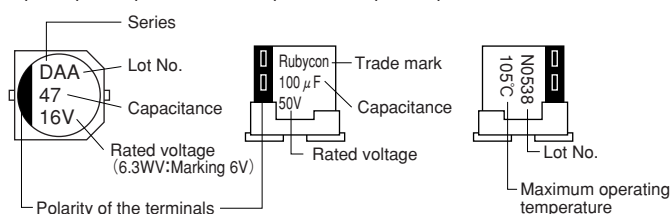
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency (Hz)	60(50)	120	500	1k	10k≤
0.1~1 μF	0.50	1.00	1.20	1.30	1.50
2.2~4.7 μF	0.65	1.00	1.20	1.30	1.50
10~47 μF	0.80	1.00	1.20	1.30	1.50
100~1000 μF	0.80	1.00	1.10	1.15	1.20
2200~6800 μF	0.80	1.00	1.05	1.10	1.15

◆MARKING

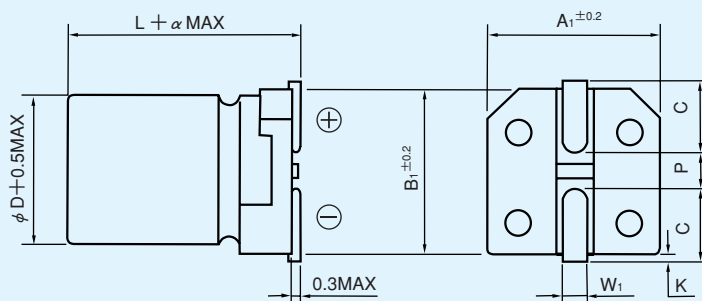
〈φ4~φ6.3, φ8×6.5〉 〈φ8×10.5, φ10~φ18〉



◆PART NUMBER

□□□ **SGV** □□□□□ □ □□□ **DXL**
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Case Size

(mm)



$\phi 8 \times 10.5 \sim \phi 18$ have sleeve.

ϕ D	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

Size ϕ D×L(mm), Ripple Current (mA r.m.s./105°C, 120Hz)[illegible]