SGV SERIES

105℃ Standard, Lead Free Reflow Soldering

◆FEATURES

- Load Life : 105℃ 2000～5000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- RoHS compliance.

◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	−55～+105℃	−40～+105℃	−25～+105℃
Rated Voltage Range	6.3～50Vdc	63, 100Vdc	400Vdc
Capacitance Tolerance	±20%(20℃,120Hz)		
Leakage Current(MAX)	6.3～100Vdc	400Vdc	
	I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage)	I=0.04CV+100μA (1minute) I=0.02CV+25μA (5minutes)	
	I= Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)		

(tanδ) Dissipation Factor(MAX) (20℃,120Hz)

Rated Voltage (Vdc)		6.3	10	16	25	35	50	63	100	400
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	0.20

When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.

Endurance

After applying rated voltage with rated ripple current for specified time at 105℃, he capacitors shall meet the following requirements.

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.

Rated Voltage (Vdc)	Life Time (hrs)
6.3～100	2000
400	5000

Low Temperature Stability Impedance Ratio(MAX) (120Hz)

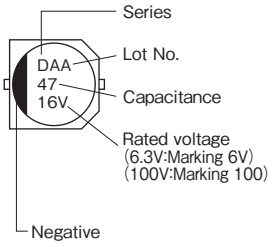
Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	400
Z(−25℃)/Z(20℃)	4	3	2	2	2	2	2	2	6
Z(−40℃)/Z(20℃)	8	8	4	4	3	3	5	5	−

◆MULTIPLIER FOR RIPPLE CURRENT

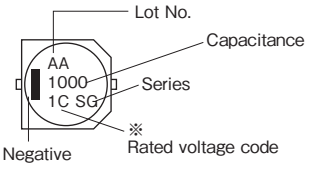
Frequency (Hz)		60(50)	120	500	1k	10k≦
Coefficient	0.47～1μF	0.50	1.00	1.20	1.30	1.50
	2.2～4.7μF	0.65	1.00	1.20	1.30	1.50
	10～47μF	0.80	1.00	1.20	1.30	1.50
	100～1000μF	0.80	1.00	1.10	1.15	1.20
	2200～6800μF	0.80	1.00	1.05	1.10	1.15

◆MARKING

〈φ4～φ10〉



〈φ12.5～φ18〉



※Voltage code

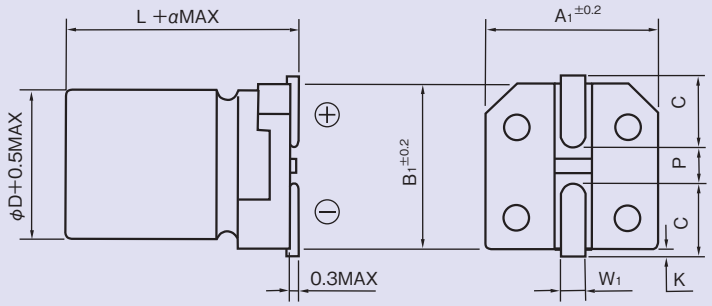
Rated Voltage (Vdc)	6.3	10	16	25	35	50	63	100	400
Rated Voltage code	0J	1A	1C	1E	1V	1H	1J	2A	2G

◆PART NUMBER

□□□	SGV	□□□□□	M	□□□	D×L
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Case Size

◆DIMENSIONS

(mm)



φD	L	A1	B1	C	W1	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 φD×L(mm), Rated Ripple Current (mA r.m.s./105℃, 120Hz)

Vdc	Cap (μF)	Size (φDXL)	Ripple
6.3	22	4×6.1	26
	33	4×6.1	29
	47	5×6.1	46
	100	6.3×6.1	71
	220	6.3×8	121
	470	8×10.5	210
	1000	10×10.5	495
		12.5×13.5	
	2200	12.5×16	750
	3300	16×21.5	930
		18×16.5	
	4700	18×21.5	1200
	6800	18×21.5	1350
10	33	5×6.1	43
	100	6.3×6.1	71
	330	8×10.5	195
	470	8×10.5	210
		10×10.5	440
	1000	12.5×16	500
	2200	16×16.5	810
	3300	16×21.5	1000
		18×16.5	
	4700	18×21.5	1200
16	10	4×6.1	28
	22	5×6.1	39
	47	6.3×6.1	70
	100	6.3×8	111
	220	8×10.5	185
	330	8×10.5	290
		10×10.5	440
	470	8×10.5	320
		10×10.5	460
	1000	16×16.5	630
	2200	16×21.5	930
		18×16.5	
	3300	18×21.5	1150

Vdc	Cap (μF)	Size (φDXL)	Ripple
25	33	6.3×6.1	65
	47	6.3×8	79
		8×6.5	91
	100	8×10.5	180
	220	8×10.5	320
		10×10.5	355
	330	10×10.5	450
		12.5×13.5	
	470	10×10.5	490
	1000	16×21.5	700
		18×16.5	
	2200	18×21.5	1050
	3300	18×21.5	1700
35	4.7	4×6.1	15
	10	5×6.1	28
	22	6.3×6.1	55
	33	6.3×8	76
		8×6.5	84
	100	8×10.5	180
		10×10.5	305
	220	10×10.5	450
		12.5×13.5	
	330	12.5×16	460
	470	16×16.5	490
	1000	16×21.5	750
		18×16.5	
50	0.47	4×6.1	4
	1	4×6.1	8
	2.2	4×6.1	11
	3.3	4×6.1	14
	4.7	5×6.1	19
	10	6.3×6.1	35
	22	6.3×8	67
		8×6.5	70
	33	8×10.5	140
	47	8×10.5	167
		10×10.5	180
	100	8×10.5	230
		10×10.5	315
	220	12.5×16	380
	330	16×16.5	470
	470	16×21.5	550
		18×16.5	
	1000	18×21.5	820

Vdc	Cap (μF)	Size (φDXL)	Ripple
63	22	8×10.5	55
	33	8×10.5	115
	47	8×10.5	120
	100	12.5×16	225
	220	16×16.5	385
	330	16×21.5	490
		18×16.5	
	470	18×21.5	590
100	10	8×10.5	65
	22	10×10.5	90
	33	10×10.5	135
	47	12.5×13.5	160
	100	16×16.5	285
	220	16×21.5	440
		18×16.5	
400	10	12.5×13.5	92
	22	16×21.5	170
	33	18×21.5	238