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°C	−40 ~+105°C
Rated Voltage Range	6.3~50V.DC	63 , 100V.DC
Capacitance Tolerance	± 20%(20°C,120Hz)	
Leakage Current(MAX)	I=0.01CV or 3μA 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) (tanδ)

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

(20°C,120Hz)

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 2000 hrs at 105°C, the 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.

Low Temperature Stability Impedance Ratio(MAX)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100
Z(−25°C)/Z(20°C)	4	3	2	2	2	2	2	2
Z(−40°C)/Z(20°C)	8	8	4	4	3	3	5	5

(120Hz)

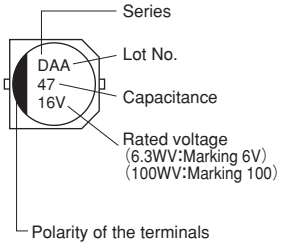
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

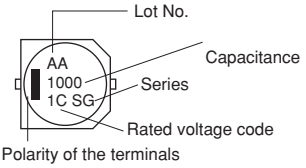
Frequency (Hz)		60(50)	120	500	1k	10k≦
Coefficient	0.1~1μF	0.50	1.00	1.20	1.30	1.50
	2.2~4.7μF	0.65	1.00	1.20	1.30	1.50
	10~47μF	0.80	1.00	1.20	1.30	1.50
	100~1000μF	0.80	1.00	1.10	1.15	1.20
	2200~6800μF	0.80	1.00	1.05	1.10	1.15

◆MARKING

<φ 4~φ 10>



<φ 12.5~φ 18>



Voltage code

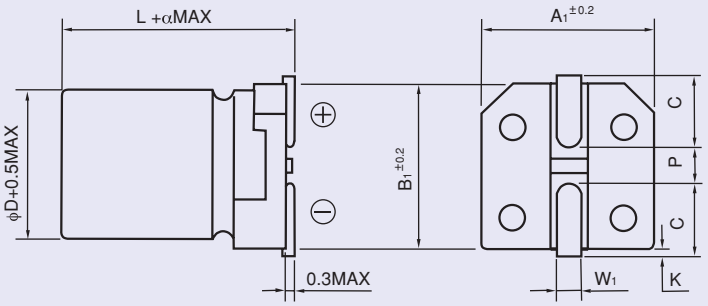
(V) Rated Voltage	6.3	10	16	25	35	50	63	100
Rated Voltage code	0J	1A	1C	1E	1V	1H	1J	2A

◆PART NUMBER

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

◆DIMENSIONS

(mm)



Vibration proof package are available forφ 8 to φ 18.
For details, please consult us.

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

WV (V.DC) / Cap(μF)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		100 (2A)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											4×6.1	1.0				
0.22											4×6.1	2.6				
0.33											4×6.1	3.2				
0.47											4×6.1	4.0				
1											4×6.1	8.0				
2.2											4×6.1	11				
3.3											4×6.1	14				
4.7									4×6.1	15	5×6.1	19			8×10.5	55
10					4×6.1	28			5×6.1	28	6.3×6.1	35			8×10.5	65
22	4×6.1	26			5×6.1	39			6.3×6.1	55	6.3×8 / 8×6.5	67 / 70	8×10.5	55	10×10.5	90
33	4×6.1	29	5×6.1	43			6.3×6.1	65	6.3×8 / 8×6.5	76 / 84	8×10.5	140	8×10.5	115	10×10.5	135
47	5×6.1	46			6.3×6.1	70	6.3×8 / 8×6.5	79 / 91			8×10.5 / 10×10.5	167 / 180	8×10.5	120	12.5×13.5	160
100	6.3×6.1	71	6.3×6.1	71	6.3×8	111	8×10.5	180	8×10.5 / 10×10.5	180 / 305	8×10.5 / 10×10.5	230 / 315	12.5×16	225	16×16.5	285
220	6.3×8	121			8×10.5	185	8×10.5 / 10×10.5	320 / 355	10×10.5 / 12.5×13.5	450	12.5×16	380	16×16.5	385	16×21.5 / 18×16.5	440
330			8×10.5	195	8×10.5 / 10×10.5	290 / 440	10×10.5 / 12.5×13.5	450	12.5×16	460	16×16.5	470	16×21.5 / 18×16.5	490		
470	8×10.5	210	8×10.5 / 10×10.5	210 / 440	8×10.5 / 10×10.5	320 / 460	10×10.5	490	16×16.5	490	16×21.5 / 18×16.5	550	18×21.5	590		
1000	10×10.5 / 12.5×13.5	495	12.5×16	500	16×16.5	630	16×21.5 / 18×16.5	700	16×21.5 / 18×16.5	750	18×21.5	820				
2200	12.5×16	750	16×16.5	810	16×21.5 / 18×16.5	930	18×21.5	1050								
3300	16×21.5 / 18×16.5	930	16×21.5 / 18×16.5	1000	18×21.5	1150	18×21.5	1700								
4700	18×21.5	1200	18×21.5	1200												
6800	18×21.5	1350														