SG 系 列 SERIES

- 2000h at 105°C
- Standard series for general purpose
- RoHS Compliant

Items	Characteristics	
Operating Temperature Range(℃)	-40～+105	-25～+105
Voltage Range (V)	10～100	160～550
Capacitance Range (μF)	82～82000	
Capacitance Tolerance(20℃,120Hz)	±20%	
Leakage Current (μA)	I≤ 0.01CV or 1.5mA whichever is greater After 5 minute at 20℃ application of rated voltage I:Max. leakage current (μA) C:Nominal Capacitance (μF) V:Rated Voltage (V)	

Dissipation Factor (20℃,120Hz)									
Rated Voltage (V)	10	16	25	35	50	63~100	160~450	500	550
Tanδ(max)	0.55	0.50	0.40	0.35	0.30	0.20	0.15	0.24	0.26

Low Temperature Characteristics (Max. Impedance Ratio at 120Hz)					
Rated Voltage (V)	10~25	35~100	160~450	500	550
Z-25℃/Z+20℃	-	-	4	6	8
Z-40℃/Z+20℃	6	3	-	-	-

Load Life

The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105℃.

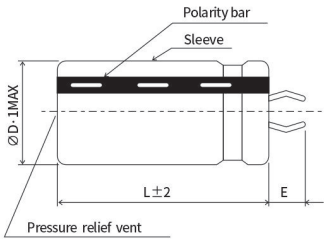
Capacitance change	≤± 20% of the initial value
D.F.(Tanδ)	≤200% of specified value
Leakage current	≤The initial specified value

Shelf Life

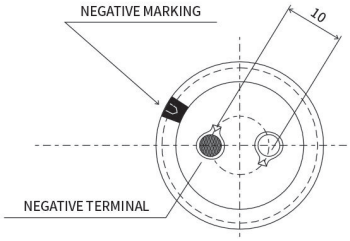
The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃without voltage applied .

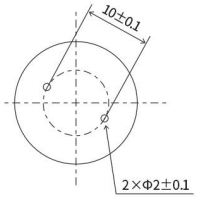
Capacitance change	≤± 20% of the initial value
D.F.(Tanδ)	≤200% of specified value
Leakage current	≤200% of specified value

◆ Dimensions(mm)

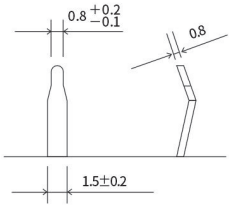


E=Short pin:4±0.5mm
E=Long pin:6.3±1mm





Mounting Holes



Teminal Dimensions

◆ Temperature Coefficient

Temperature(℃)	+40	+55	+70	+85	+105
Coefficient	2.70	2.50	2.10	1.70	1.00

◆ Frequency Coefficien

Frequency / Voltage(V)	50/60HZ	120HZ	1KHZ	≥10KHZ
<160	0.80	1.00	1.32	1.45
≥160	0.80	1.00	1.30	1.41

◆ Ratings for SG Series

UR (Surge Voltage) Code (V)	Rated Capacitance (μF)	Max Dissipation Factor 20°C120Hz tanδ	Rated Ripple Current 105°C120Hz (A rms)	Size φD×L (mm)
10(13)1A	10000	0.55	1.7	22×25
	15000	0.55	2.1	22×30
	18000	0.55	2.4	25×30
	22000	0.55	2.6	25×35
	33000	0.55	3.5	25×40
	39000	0.55	3.7	25×45
	47000	0.55	4.6	30×40
	56000	0.55	5.0	30×45
	68000	0.55	5.8	30×50
	82000	0.55	6.0	35×45
16(20)1C	8200	0.50	1.7	22×25
	10000	0.50	2.0	22×30
	12000	0.50	2.2	22×35
	15000	0.50	2.6	22×40
	18000	0.50	2.9	25×35
	22000	0.50	3.4	25×40
	27000	0.50	3.8	25×45
	33000	0.50	4.3	30×40
	39000	0.50	4.7	30×45
	47000	0.50	5.2	30×50
	56000	0.50	5.9	35×45
	68000	0.50	6.3	35×55
	82000	0.50	6.4	35×60
25(32)1E	5600	0.40	1.7	22×25
	6800	0.40	1.9	22×30
	8200	0.40	2.1	22×35
	10000	0.40	2.4	22×40
	12000	0.40	2.6	22×45
	15000	0.40	3.1	25×40
	18000	0.40	3.5	25×50
	22000	0.40	4.2	30×40
	33000	0.40	5.4	35×40
	39000	0.40	5.7	35×45
	47000	0.40	6.2	35×55
	56000	0.40	6.4	35×60
35(44)1V	3300	0.35	1.4	22×25
	3900	0.40	1.7	22×30
	4700	0.40	1.8	25×25
	5600	0.40	2.0	25×30
	6800	0.40	2.3	25×35
	8200	0.40	2.6	25×40
	10000	0.40	2.9	25×45
	12000	0.40	3.2	25×50
	15000	0.40	3.7	30×45
	18000	0.40	4.1	30×50
	22000	0.40	4.9	35×45
	27000	0.40	5.5	35×50
	33000	0.40	6.1	35×60
50(63)1H	2200	0.30	1.5	22×25
	2700	0.30	1.7	22×30
	3300	0.30	2.0	22×35
	3900	0.30	2.3	22×35
	4700	0.30	2.6	22×40
	5600	0.30	2.9	25×40
	6800	0.30	3.4	25×45
	8200	0.30	3.8	25×50
	10000	0.30	4.1	30×45
	12000	0.30	4.5	30×50
	15000	0.30	4.8	35×50
	18000	0.30	5.1	35×55
	22000	0.30	5.3	35×60
63(79)1J	1500	0.20	1.5	22×25
	1800	0.20	1.6	22×30
	2200	0.20	1.8	22×30
	2700	0.20	2.0	22×35
	3300	0.20	2.3	22×40
	3900	0.20	2.6	22×45
	4700	0.20	2.9	25×40
	5600	0.20	3.3	25×45
	6800	0.20	3.8	30×40
	8200	0.20	4.2	30×50
	10000	0.20	4.7	35×45
	12000	0.20	4.9	35×50
	15000	0.20	5.1	35×60

UR (Surge Voltage) Code (V)	Rated Capacitance (μF)	Max Dissipation Factor 20°C120Hz tanδ	Rated Ripple Current 105°C120Hz (A rms)	Size φD×L (mm)
80(100) 1K	1000	0.20	1.3	22×25
	1200	0.20	1.4	22×30
	1500	0.20	1.7	25×25
	1800	0.20	1.9	25×30
	2200	0.20	2.1	25×35
	2700	0.20	2.5	25×40
	3300	0.20	2.8	25×45
	3900	0.20	3.1	25×50
	4700	0.20	3.6	30×45
	5600	0.20	3.9	30×50
	6800	0.20	4.2	35×50
	8200	0.20	4.3	35×50
	10000	0.20	4.5	35×60
100(125) 2A	680	0.20	1.2	22×25
	820	0.20	1.4	22×30
	1000	0.20	1.6	22×35
	1200	0.20	1.8	22×40
	1500	0.20	2.1	25×35
	1800	0.20	2.3	25×40
	2200	0.20	2.6	25×50
	2700	0.20	3.0	30×45
	3300	0.20	3.3	30×50
	3900	0.20	3.7	35×50
	4700	0.20	4.2	35×55
	5600	0.20	4.7	35×60
	6800	0.20	5.4	35×65
	8200	0.20	5.8	35×70
160(200)2C	220	0.15	0.8	22×25
	270	0.15	1.0	22×25
	330	0.15	1.2	22×30
	390	0.15	1.5	22×30
	470	0.15	1.6	25×30
	560	0.15	1.8	25×35
	680	0.15	1.9	25×35
	820	0.15	2.0	25×40
	1000	0.15	2.2	25×50
	1200	0.15	2.4	30×40
	1500	0.15	2.6	30×45
	1800	0.15	3.0	35×45
	2200	0.15	3.1	35×50
200(250)2D	220	0.15	1.1	22×25
	270	0.15	1.2	22×30
	330	0.15	1.4	22×35
	390	0.15	1.5	22×35
	470	0.15	1.6	22×40
	560	0.15	1.7	22×45
	680	0.15	1.9	25×45
	820	0.15	2.1	25×50
	1000	0.15	2.3	30×45
	1200	0.15	2.5	30×50
	1500	0.15	2.6	35×50
	1800	0.15	2.7	35×55
	2200	0.15	3.2	35×60
250(300)2E	150	0.15	0.8	22×25
	180	0.15	1.0	22×30
	220	0.15	1.1	22×30
	270	0.15	1.2	22×35
	330	0.15	1.3	22×40
	390	0.15	1.4	22×45
	470	0.15	1.5	22×50
	560	0.15	1.6	25×45
	680	0.15	1.8	30×40
	820	0.15	1.9	30×45
	1000	0.15	2.0	35×45
	1200	0.15	2.2	35×50
	1500	0.15	2.6	35×60
350(400)2V	100	0.15	0.7	22×25
	120	0.15	0.8	22×30
	150	0.15	0.9	22×35
	180	0.15	1.0	22×40
	220	0.15	1.0	22×45
	270	0.15	1.1	25×40
	330	0.15	1.3	25×55
	390	0.15	1.5	30×40

◆ Ratings for SG Series

UR (Surge Voltage) Code	Rated Capaci-tance	Max Dissipation Factor 20°C120Hz	Rated Ripple Current 105°C120Hz	Size ϕD×L
(V)	(μF)	tanδ	(A rms)	(mm)
350(400)2V	470	0.15	1.8	30×45
	560	0.15	2.0	35×45
	680	0.15	2.2	35×50
	820	0.15	2.6	35×65
	1000	0.15	2.9	35×60
400(450)2G	82	0.15	0.65	22×25
	100	0.15	0.70	22×30
	120	0.15	0.75	22×30
	150	0.15	0.83	22×35
	180	0.15	0.96	22×40
	220	0.15	1.1	22×45
	270	0.15	1.3	25×45
	330	0.15	1.5	30×35
	390	0.15	1.6	30×40
	470	0.15	1.9	35×40
	560	0.15	2.1	35×45
	680	0.15	2.3	35×50
	820	0.15	2.7	35×55
	1000	0.15	3.0	35×60
420(470)2X	82	0.15	0.65	22×25
	100	0.15	0.70	22×30
	120	0.15	0.80	22×30
	150	0.15	0.83	25×30
	180	0.15	0.96	25×35
	220	0.15	1.10	25×40
	270	0.15	1.3	25×45
	330	0.15	1.6	30×40
	390	0.15	1.6	30×45
	470	0.15	1.9	30×50
	560	0.15	2.1	35×45
	680	0.15	2.3	35×50
	820	0.15	2.8	35×60
	1000	0.15	3.2	35×70
450(500)2W	82	0.15	0.64	22×30
	100	0.15	0.70	22×35
	120	0.15	0.73	22×35
	150	0.15	0.78	25×35
	180	0.15	0.87	25×40
	220	0.15	0.95	25×45
	270	0.15	1.2	25×50
	330	0.15	1.4	30×40
	390	0.15	1.6	30×45
	470	0.15	1.9	35×45
	560	0.15	2.1	35×50
	680	0.15	2.5	35×60
	820	0.15	2.9	35×65
	1000	0.15	3.5	35×75
500(550)2H	100	0.24	0.67	25×30
	120	0.24	0.77	25×35
	150	0.24	0.85	25×40
	180	0.24	1.0	25×45
	220	0.24	1.1	30×40
	270	0.24	1.3	30×45
	330	0.24	1.7	30×50
	390	0.24	1.8	35×45
	470	0.24	2.0	35×55
	560	0.24	2.2	35×60
	680	0.24	2.7	35×70
550(600)2L	100	0.26	0.7	25×35
	220	0.26	1.2	30×45
	330	0.26	1.5	35×50
	470	0.26	2.1	35×60
	560	0.26	2.4	35×70