SG Series

Features

- 105℃, 1,000 hours assured
- High temperature Category range, with 7mm height
- RoHS compliance

Specifications

Items	Performance
Category Temperature Range	-40℃ ~ +105℃
Capacitance Tolerance	±20% (at 120 Hz, 20℃)
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V
Tanδ (at 120 Hz, 20℃)	

Rated Voltage	4	6.3	10	16	25	35	50	63
Tanδ (max)	0.35	0.23	0.20	0.17	0.15	0.12	0.10	0.10

Low Temperature Characteristics (at 120 Hz)

Impedance ratio shall not exceed the values given in the table below.

Rated Voltage		4	6.3	10	16	25	35	50	63
Impedance Ratio	Z(-25℃)/Z(+20℃)	6	4	3	3	2	2	2	2
	Z(-40℃)/Z(+20℃)	12	10	8	6	4	4	4	4

Endurance

Test Time	1,000 Hrs
Capacitance Change	Within ±20% of initial value
Tanδ	Less than 200% of specified value
Leakage Current	Within specified value

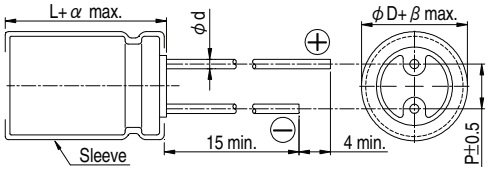
* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 1,000 hours at 105℃.

Shelf Life Test: Test time: 500 hours; other items are the same as those for the Endurance.

Ripple Current and Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	60 (50)	120	500	1k	10k up
≦ 47	0.75	1.00	1.20	1.30	1.45
100 ~ 330	0.88	1.00	1.10	1.15	1.20

Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

ϕD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ϕd	0.45	0.5		
α	1.0			
β	0.5			

Dimension and Permissible Ripple Current

Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 120 Hz, 105℃

Rated Volt. (Vdc) / μF \ Contents		4V (0G)		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)	
		ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA
1	010													4×7	10	4×7	11
2.2	2R2													4×7	15	4×7	17
3.3	3R3													4×7	18	4×7	21
4.7	4R7											4×7	22	5×7*	23	5×7	26
10	100							4×7	25	4×7	26	5×7*	30	6.3×7*	34	6.3×7	40
22	220			4×7	31	4×7	32	5×7*	39	5×7*	41	6.3×7	47	6.3×7	53	8×7	70
33	330	4×7	32	4×7	32	4×7	35	5×7	43	6.3×7	53	8×7*	71	8×7	76		
47	470	4×7	38	4×7	38	5×7*	47	6.3×7*	59	6.3×7	65	8×7	83	8×7	85		
100	101	5×7	61	6.3×7*	75	6.3×7	80	6.3×7	90	8×7	125						
220	221	6.3×7	90	6.3×7	99	8×7	140	8×7	146								
330	331	8×7	156	8×7	156												

Note: Case size in mark of "*" is available to product down size.

Part Numbering System

SG Series	330μF	±20%	6.3V	Bulk Package	Gas Type	8ϕ×7L	
SG-	**331**	**M**	**0J**	**BK**	**-**	**0807**	**XX**
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	**S** = Standard **KS** = AEC-Q200 Qualified, Safety Critical Application **LS** = AEC-Q200 Qualified, Non-Safety Critical Application

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