



SG Series

Features

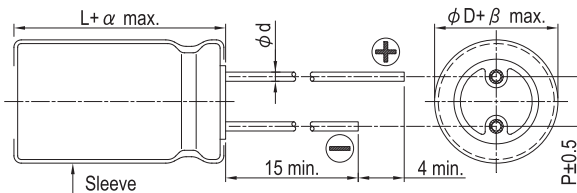
- 105°C, 1,000 hours assured
- High temperature Category range, with 7mm height
- RoHS compliant



Specifications

Items	Performance										
Category Temperature Range	-40°C ~ +105°C										
Capacitance Tolerance	±20% (at 120 Hz, 20°C)										
Leakage Current (at 20°C)	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°C)	Rated Voltage										
	Tanδ (max)										
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°C)/Z(+20°C)	6	4	3	3	2	2	2	2	
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									
Shelf Life Test	* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 1,000 hours at 105°C.										
Ripple Current and Frequency Multipliers	Test time: 500 hours; other items are the same as those for the Endurance.										
	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

	4	5	6.3	8
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°C

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
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	General Purpose
SG-	331	M	0J	BK	-	0807	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Lead Configuration and Package	Rubber Type	Case Size	Application

Note: For more details, please refer to "Part Numbering System - Radial Type" on page 139.