

SG Series

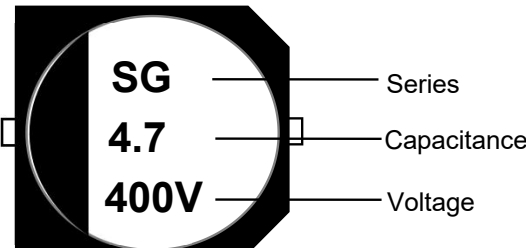
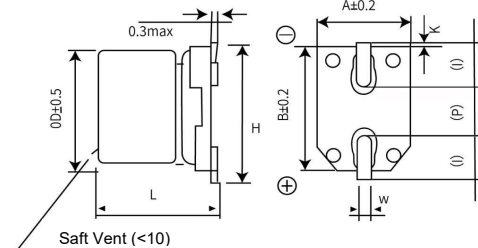
Feature

- ◆ High-temperature lead-free reflow soldering products
- ◆ Medium and high voltage, long life
- ◆ Reflow soldering
- ◆ RoHS compliant

Items	Characteristics						
Temperature Range	-40°C ~ +105°C						
Rated Voltage Range	160V ~ 450V						
Capacitance Range	1 ~ 100 μF						
Capacitance Tolerance	±20% (20°C, 120Hz)						
Leakage Current	CV ≤ 1000 (for 160~400V): I ≤ 0.1CR * UR + 40 (μA), CV ≥ 1000 (for 160~400V): I ≤ 0.04CR * UR + 100 (μA) The larger of the two calculated values shall apply (measurement taken after 2 minutes).						
Dissipation Factor (tg δ) (20°C, 120Hz)	UR (V)	160	200	250	400	420	450
	tg δ	0.20	0.20	0.20	0.24	0.24	0.26
Endurance	Under the condition of 105°C, with the rated operating voltage applied to the capacitors, and after returning to 20°C, the capacitors shall meet the following requirements: ΦD = 6.3 for 2000 hours; ΦD = 8, 10, 12.5 for 5000 hours; ΦD = 16 and 18 for 8000 hours.						
	Capacitance Change	within ±30% of the initial value					
	Dissipation Factor	≤300% of initial rated value					
	Leakage Current	≤ initial rated value					
High Temperature	After being stored for 1000 hours without voltage application in a 105°C environment and then recovered to 20°C, the						
Low Temperature	UR (V)	160	200	250	400	420	450
	Z(-25°C)/Z(+20°C)	3	3	3	5	5	5
	Z(-40°C)/Z(+20°C)	6	6	6	6	6	6
Resistance to soldering heat	The capacitor shall be maintained on a hot plate at 250°C for 30 seconds. After removal and recovery at room temperature, it shall meet the requirements listed on the right.			Capacitance Change		within ±10% of the initial value	
				Dissipation Factor (tg δ)		≤ initial rated value	
				Leakage Current		≤ initial rated value	

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	50Hz	120Hz	300Hz	1KHz	≥10KHz
Coefficient	0.80	1.00	1.25	1.40	1.60

Mark	Appearance & Dimension
 <p>Series</p> <p>Capacitance</p> <p>Voltage</p>	 <p>Unit: mm</p>

ΦD	L	A, B	H	I	W	P	K
6.3	7.7±0.3	6.6	7.2	2.4	0.5 ~ 0.8	2.2	0.35+0.15/-0.20
	10.5±0.5						
8	12.5±0.5	8.3	9.0	3.4	0.8 ~ 1.1	3.1	
	10.5±0.5						
10	12.5±0.5	10.3	11.1	3.5	1.1~1.4	4.5	
	13.5±0.5						
12.5	16.5±0.5	13.5	13.9	4.7	6.4	4.4	
	16.5±0.5						
16	21.5±0.5	17	17.8	5.5	6.4	6.4	
	16.5±0.5						
18	21.5±0.5	19	19.7	6.7	6.4	6.4	
	21.5±0.5						

SG Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (μF)	Dimension(mm)		Electrical Characteristics		Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current (120Hz/105℃) (mA r.m.s)	tan δ (120Hz/20℃)	
160	1	6.3	7.7	15	0.20	1000
	2.2	6.3	7.7	20	0.20	1000
	3.3	6.3	7.7	25	0.20	1000
	4.7	6.3	7.7	30	0.20	1000
	5.6	6.3	10.5	57	0.20	700
	6.8	6.3	10.5	60	0.20	700
	6.8	8	10.5	70	0.20	500
	10	8	10.5	90	0.20	500
	12	8	10.5	95	0.20	500
	15	8	10.5	110	0.20	500
	22	10	10.5	150	0.20	500
	33	10	12.5	195	0.20	400
	47	12.5	13.5	275	0.20	200
	56	12.5	13.5	300	0.20	200
	68	12.5	13.5	330	0.20	200
	100	16	16.5	500	0.20	125
200	1	6.3	7.7	15	0.20	1000
	2.2	6.3	7.7	20	0.20	1000
	3.3	6.3	7.7	25	0.20	1000
	4.7	6.3	7.7	30	0.20	1000
	4.7	6.3	10.5	40	0.20	700
	5.6	6.3	10.5	45	0.20	700
	6.8	6.3	10.5	50	0.20	700
	6.8	8	10.5	65	0.20	500
	10	8	10.5	85	0.20	500
	12	8	10.5	90	0.20	500
	15	8	12.5	110	0.20	400
	22	10	10.5	140	0.20	500
	33	10	12.5	185	0.20	400
	47	12.5	13.5	260	0.20	200
	56	12.5	13.5	280	0.20	200
	68	12.5	16.5	340	0.20	150
100	16	16.5	480	0.20	125	
250	1	6.3	7.7	15	0.20	1000
	2.2	6.3	7.7	20	0.20	1000
	3.3	6.3	7.7	25	0.20	1000
	4.7	6.3	10.5	50	0.20	700
	5.6	8	10.5	55	0.20	500
	6.8	8	10.5	75	0.20	500
	6.8	8	12.5	85	0.20	400
	10	8	12.5	100	0.20	400
	12	8	12.5	110	0.20	400
	15	10	12.5	150	0.20	400
	22	12.5	13.5	215	0.20	200
	33	12.5	13.5	260	0.20	200
	47	12.5	13.5	280	0.20	200
	56	16	16.5	390	0.20	125
	68	16	16.5	475	0.20	125
	100	18	16.5	620	0.20	125

SMD ALUMINUM ELECTROLYTIC CAPACITORS

SG Characteristics Table

Rated Voltage (V.DC)	Capacitance (±20%) (μF)	Dimension(mm)		Electrical Characteristics		Minimum Packaging Quantity (PCS)
		ΦD	L	Rated Ripple Current (120Hz/105°C) (mA r.m.s)	tan δ (120Hz/20°C)	
400	1	6.3	7.7	12	0.24	1000
	1	6.3	10.5	25	0.24	700
	2.2	6.3	10.5	35	0.24	700
		8	10.5	45	0.24	500
	3.3	8	10.5	50	0.24	500
	4.7	8	10.5	60	0.24	500
		8	12.5	65	0.24	400
	5.6	10	10.5	75	0.24	500
	6.8	8	12.5	75	0.24	400
		10	10.5	82	0.24	500
	10	10	12.5	110	0.24	400
	12	10	12.5	120	0.24	400
	15	12.5	13.5	150	0.24	200
	22	12.5	16.5	200	0.24	150
	33	16	16.5	290	0.24	125
47	16	16.5	345	0.24	125	
56	18	16.5	355	0.24	125	
420	1	6.3	10.5	20	0.24	700
	2.2	6.3	10.5	30	0.24	700
	3.3	8	10.5	41	0.24	500
	4.7	8	12.5	53	0.24	400
	5.6	8	12.5	58	0.24	400
	6.8	10	10.5	67	0.24	500
	10	10	12.5	90	0.24	400
	12	12.5	13.5	115	0.24	200
	15	12.5	13.5	130	0.24	200
450	1	6.3	10.5	20	0.26	700
	2.2	8	10.5	30	0.26	500
	3.3	8	10.5	41	0.26	500
	4.7	10	10.5	56	0.26	500
	5.6	10	10.5	67	0.26	500
	6.8	10	10.5	67	0.26	500
	10	12.5	13.5	105	0.26	200
	12	12.5	13.5	115	0.26	200
	15	12.5	13.5	125	0.26	200