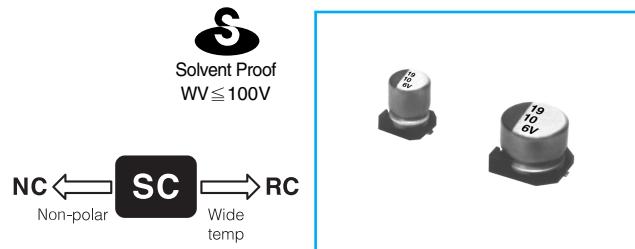


# SC Chip type, Standard Series

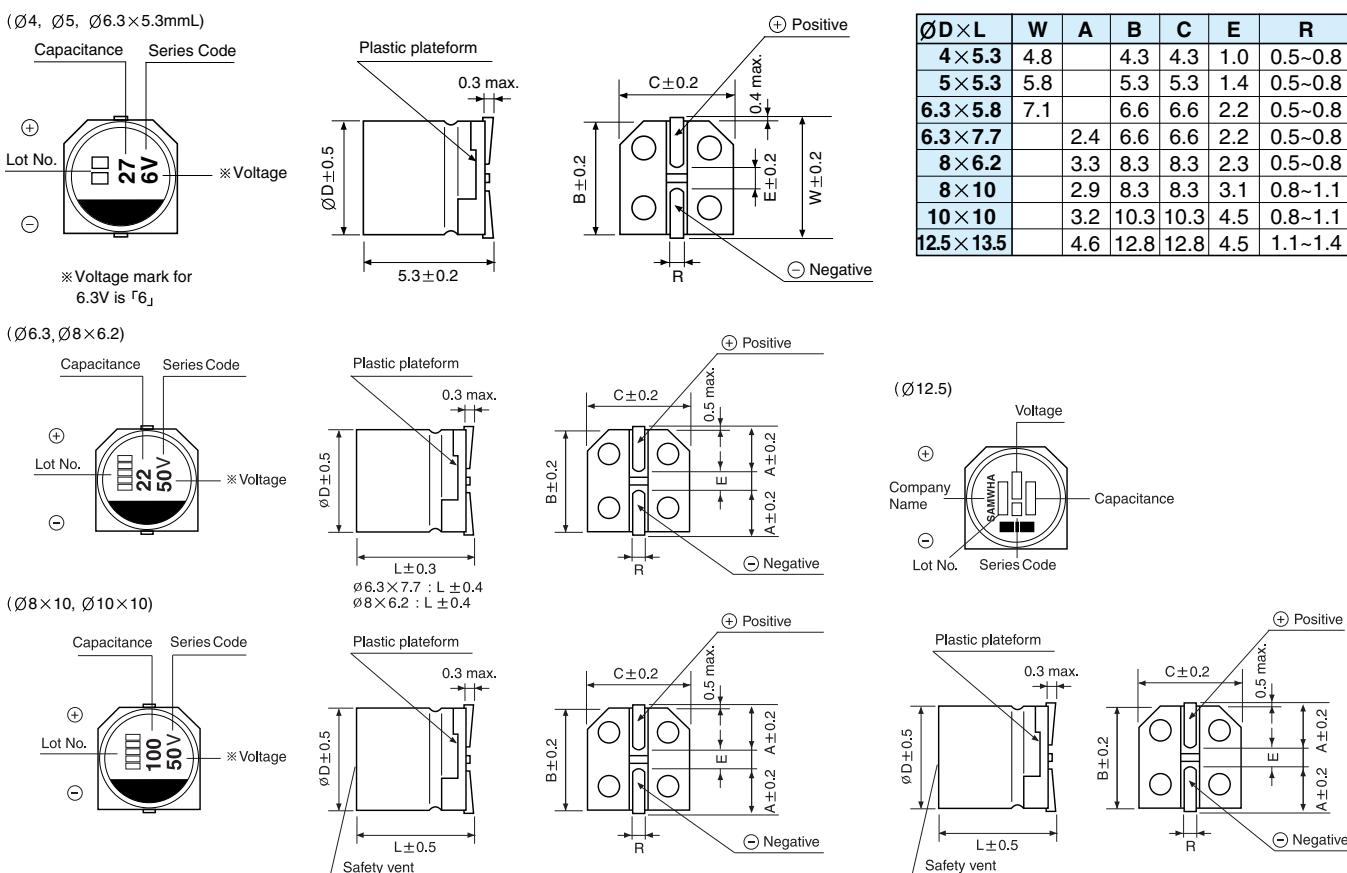
- Chip type higher capacitance in larger case size
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive



Item	Characteristics																								
Operating temperature range	-40 ~ +85°C																								
Leakage current max.	WV $\leq$ 100 I = 0.01CV or $3\mu A$ whichever is greater (after 2 minutes) WV $\geq$ 160 I = 0.04CV + $100\mu A$ (after 1 minutes)																								
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C																								
Dissipation factor max. (at 120Hz, 20°C)	WV	4	6.3	10	16	25	35	50	63	100	160	200	250	400	450										
	$\tan\delta$	0.40	0.35	0.24	0.20	0.16	0.15	0.12	0.12	0.12	0.20	0.20	0.20	0.25	0.25										
Low temperature characteristics (Impedance ratio at 120Hz)	WV	4	6.3	10	16	25	35 ~ 100	160 ~ 250	400 ~ 450																
	Z-25°C/Z+20°C	6	5	4	3	2	2	3	6						6										
	Z-40°C/Z+20°C	12	10	8	6	4	3	6	10																
Load life (after application of the rated voltage for 2000 hours at 85°C)	Leakage current	Less than specified value																							
	Capacitance change	Within $\pm 20\%$ of initial value (Small size : $\pm 25\%$ )																							
	$\tan\delta$	Less than 200% of the specified value																							
Shelf life(at 85°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.																								
Resistance to soldering heat	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 30 seconds.																								
	Leakage current	Less than specified value																							
	Capacitance change	Within $\pm 10\%$ of initial value																							
	$\tan\delta$	Less than specified value																							

## DRAWING

Unit : mm



# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

## SC series

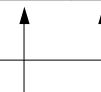
### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu\text{F}$	WV	4	6.3	10	16	25	35	50	
0.1									4×5.3 3.2
0.22									4×5.3 4.7
0.33									4×5.3 5.7
0.47									4×5.3 6.8
1.0									4×5.3 10
2.2								4×5.3 11	4×5.3 15
3.3							4×5.3 15	4×5.3 16	4×5.3 18
4.7					4×5.3 16	4×5.3 18	4×5.3 19	4×5.3 24	5×5.3 25
10	4×5.3	16	4×5.3 19	4×5.3 21	4×5.3 21	4×5.3 24	4×5.3 27	5×5.3 41	
						5×5.3 30	5×5.3 32	6.3×5.3 43	
22	3×5.3	19	4×5.3 29	4×5.3 28	4×5.3 30	5×5.3 41		6.3×5.3 71	
	4×5.3	24		5×5.3 36	5×5.3 41	6.3×5.3 53		6.3×5.8 73	
33	4×5.3	29	4×5.3 30	4×5.3 34	5×5.3 43	5×5.3 50	6.3×5.3 65	6.3×7.7 94	
			5×5.3 41	5×5.3 44	6.3×5.3 58	6.3×5.3 64	6.3×5.8 67	8×6.2 95	
47	4×5.3	35	4×5.3 36	5×5.3 47	5×5.3 52	6.3×5.3 70	6.3×7.7 94	6.3×7.7 105	
			5×5.3 48	6.3×5.3 62	6.3×5.3 69	6.3×5.8 72	8×6.2 105	8×10 140	
100	5×5.3	54	5×5.3 60	6.3×5.3 80	6.3×5.3 88	8×6.2 145	6.3×7.7 132	8×10 181	
	6.3×5.3	68	6.3×5.3 82	6.3×5.8 82	6.3×5.8 91		8×10 175	10×10 195	
220	6.3×5.3	93	6.3×5.8 91	6.3×7.7 173	6.3×7.7 162	8×10 232			
				8×6.2 175	8×10 215	10×10 250	10×10 265	10×10 320	
330			6.3×7.7 188	8×10 240	8×10 270	10×10 305	10×10 360	12.5×13.5 600	
			8×6.2 190						
470			8×10 265	8×10 290	8×10 307	10×10 400	12.5×13.5 600		
					10×10 330				
1000			8×10 370	10×10 454	12.5×13.5 710	12.5×13.5 820			
			10×10 400						
1500			10×10 480	12.5×13.5 850	12.5×13.5 870				
2200			12.5×13.5 890	12.5×13.5 960					

## SC series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu\text{F}$	WV	63		100		160		200		250		400		450	
2.2														10×10	85
3.3			6.5×5.8	29								10×10	90	10×10	100
4.7	6.3×5.8	31	6.3×5.8	35				10×10	100	10×10	100	12.5×13.5	115	12.5×13.5	115
			8×6.2	40											
10	6.3×5.8	46	8×10	77	10×10	100	12.5×13.5	150	12.5×13.5	150					
22	8×6.2	96	8×10	100	12.5×13.5	240	12.5×13.5	260							
33	8×10	117	10×10	130	12.5×13.5	260									
47	10×10	140	10×10	155											
68	10×10	160	12.5×13.5	350											
100	12.5×13.5	370	12.5×13.5	420											
220	12.5×13.5	550													



Ripple current (mA rms) at 85°C, 120Hz

Case size ØD × L (mm)

### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz $\leq$
Coefficient	0.70	1.00	1.17	1.36	1.50