

## VS series

- Endurance: +105°C 2,000 hours
- Low ESR
- Recommended Applications: High order main board, server
- RoHS Compliant and lead-free



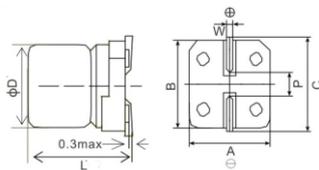
### SPECIFICATIONS

Items	Characteristics					
Category Temperature Range	-55~+105°C					
Rated Working Voltage Range	2.5~25 V <sub>dc</sub>					
Nominal Capacitance Range	27~2200μF					
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)					
DC Leakage Current	I ≤ 0.2CV or 500μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)					
Dissipation Factor (tanδ)	Rated Voltage(V <sub>dc</sub> )	2.5	6.3	10	16	25
	tanδ (max.)	0.08			0.12	
ESR(100kHz,20°C)	Value in characteristics table (at 20°C, 120Hz)					
Temperature Characteristic (Impedance Ratio at 100kHz)	Z(+105°C)/Z(+20°C)≤1.25 Z(-55°C)/Z(+20°C)≤1.25					
Endurance	After applying rated voltage for 2,000 hours at 105°C, the capacitors shall meet the following requirements.					
	Appearance	No significant damage				
	Capacitance Change	≤±20% of the initial value				
	D.F. (tanδ)	≤150% of the initial specified value				
	ESR	≤150% of the initial specified value				
Leakage Current	≤The initial specified value					
Humidity Test	After subjected to 90~95% RH for 2,000 hours at 60°C without voltage applied, the capacitors shall meet the specified values for the Endurance characteristics listed above.					
Surge Test	After subjected to 1,000 cycles each consisting of charge with the surge voltage specified at normal temperature for 30 seconds through a protective resistor and discharge for 5 minutes 30 seconds, the capacitors shall meet the following requirements.					
	Appearance	No significant damage				
	Capacitance Change	≤±20% of the initial value				
	D.F. (tanδ)	≤150% of the initial specified value				
	ESR	≤150% of the initial specified value				
Leakage Current	≤The initial specified value					

Conductive Polymer SMD Type

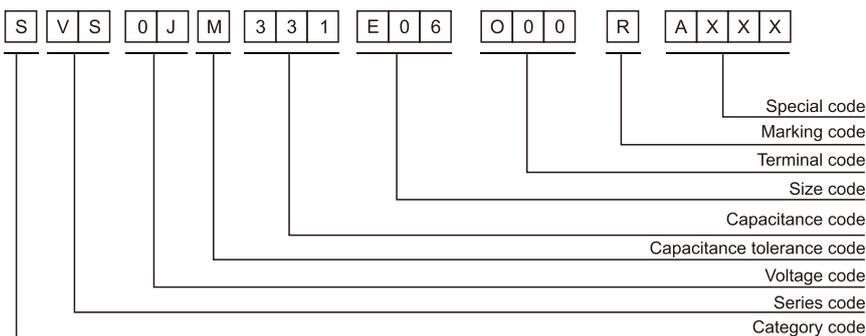
\*Note: If any doubt arises, measure the leakage current after the following voltage treatment.  
Voltage treatment: DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

### DIMENSIONS[mm]



D	6.3	8	10
P±0.2	1.9	3.1	4.5
A±0.2	6.6	8.3	10.3
B±0.2	6.6	8.3	10.3
C±0.2	7.2	9.0	11.0
W	0.5~0.8	0.7~1.1	0.7~1.1
ØD'	ØD-0.1~+0.5	ØD-0.1~+0.5	ØD-0.1~+0.5
L'	L±0.5	L±0.3	L±0.3

### PART NUMBERING SYSTEM



**VS series**

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size D×L(mm)	ESR (mΩ,20°C,100kHz)(max.)	Rated ripple current (mArms/105°C,100kHz)	Leakage Current (μA)(max.)	Part Number
2.5 (2.9)	330	6.3×6	18	2800	500	SVS0EM331E06E00RAXXX
	390	6.3×6	18	2900	500	SVS0EM391E06E00RAXXX
	470	6.3×6	18	4000	500	SVS0EM471E06E00RAXXX
	560	6.3×6	18	4000	500	SVS0EM561E06E00RAXXX
	680	6.3×9	13	4500	500	SVS0EM681E09E00RAXXX
6.3 (7.2)	220	6.3×6	18	2900	500	SVS0JM221E06E00RAXXX
	270	6.3×6	18	3100	500	SVS0JM271E06E00RAXXX
	330	6.3×6	18	3200	500	SVS0JM331E06E00RAXXX
	470	6.3×9	13	3600	592	SVS0JM471E09E00RAXXX
	560	6.3×9	13	3800	706	SVS0JM561E09E00RAXXX
	1000	8×11.5	13	4500	1260	SVS0JM102FBRE00RAXXX
	1500	8×11.5	13	4600	1890	SVS0JM152FBRE00RAXXX
2200	10×12.5	13	5800	2772	SVS0JM222GCRE00RAXXX	
10 (11.5)	68	6.3×6	45	2800	500	SVS1AM680E06E00RAXXX
	120	6.3×6	27	2800	500	SVS1AM121E06E00RAXXX
	220	6.3×6	27	2800	500	SVS1AM221E06E00RAXXX
		6.3×9	18	3100	500	SVS1AM221E09E00RAXXX
	330	6.3×9	18	3200	660	SVS1AM331E09E00RAXXX
		6.3×9	27	3500	940	SVS1AM471E09E00RAXXX
	560	8×11.5	18	3700	1120	SVS1AM561FBRE00RAXXX
		10×12.5	18	5200	1120	SVS1AM561GCRE00RAXXX
	1000	8×11.5	13	4400	2000	SVS1AM102FBRE00RAXXX
		10×12.5	13	4600	2000	SVS1AM102GCRE00RAXXX
	1500	10×12.5	13	4600	3000	SVS1AM152GCRE00RAXXX
16 (18.4)	47	6.3×6	36	1700	500	SVS1CM470E06E00RAXXX
	68	6.3×6	36	2100	500	SVS1CM680E06E00RAXXX
	100	6.3×6	27	2500	500	SVS1CM101E06E00RAXXX
	150	6.3×6	27	2500	500	SVS1CM151F06E00RAXXX
		6.3×9	22	2700	500	SVS1CM151F09E00RAXXX
	180	6.3×6	54	2600	576	SVS1CM181E06E00RAXXX
		6.3×9	22	2800	576	SVS1CM181E09E00RAXXX
	220	6.3×9	22	2600	704	SVS1CM221E09E00RAXXX
		6.3×9	22	2700	864	SVS1CM271E09E00RAXXX
	270	8×9.5	22	2900	864	SVS1CM271F9RE00RAXXX
		6.3×9	22	2700	1056	SVS1CM331E09E00RAXXX
	330	8×11.5	18	4200	1056	SVS1CM331FBRE00RAXXX
		10×12.5	18	5200	1056	SVS1CM331GCRE00RAXXX
	560	8×11.5	18	3600	1792	SVS1CM561FBRE00RAXXX
	680	10×12.5	18	4200	2176	SVS1CM681GCRE00RAXXX
1000	10×12.5	18	4300	3200	SVS1EM102GCRE00RAXXX	
25 (28.8)	27	6.3×6	45	1100	500	SVS1EM270E06E00RAXXX
	47	6.3×6	45	1800	500	SVS1EM470E06E00RAXXX
		6.3×9	31	2100	500	SVS1EM470E09E00RAXXX
	56	6.3×6	45	1800	500	SVS1EM560E06E00RAXXX
	68	6.3×6	45	1800	500	SVS1EM680E06E00RAXXX
		6.3×9	27	2500	500	SVS1EM101E09E00RAXXX
	100	6.3×6	45	2200	500	SVS1EM101E06E00RAXXX
		6.3×9	27	2600	750	SVS1EM151E09E00RAXXX
	150	6.3×9	27	2600	1100	SVS1EM221E09E00RAXXX
		8×11.5	27	2700	1100	SVS1EM221FBRE00RAXXX
	330	10×12.5	19	2900	1650	SVS1EM331GCRE00RAXXX
		8×11.5	27	2800	1650	SVS1EM331FBRE00RAXXX
	470	8×11.5	27	2900	2350	SVS1EM471FBRE00RAXXX
		10×12.5	19	3200	2350	SVS1EM471GCRE00RAXXX
	560	10×12.5	19	3400	2800	SVS1EM561GCRE00RAXXX
	680	10×12.5	19	3400	3400	SVS1EM681GCRE00RAXXX

※ Specifications subject to change without notice.