

## VS series

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

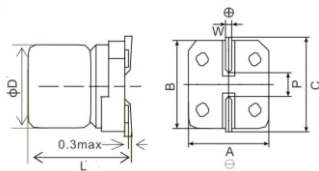


### SPECIFICATIONS

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 (tan δ)	Rated Voltage(V <sub>dc</sub> )	2.5	6.3	10	16	25
	tan δ (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. (tan δ)	150% of the initial specified value				
	ESR	150% of the initial specified value				
Leakage Current	The initial specified value					
	Humidity Test					
After subjecting 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 subjecting 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. (tan δ)	150% of the initial specified value				
	ESR	150% of the initial specified value				
Leakage Current	The initial specified value					

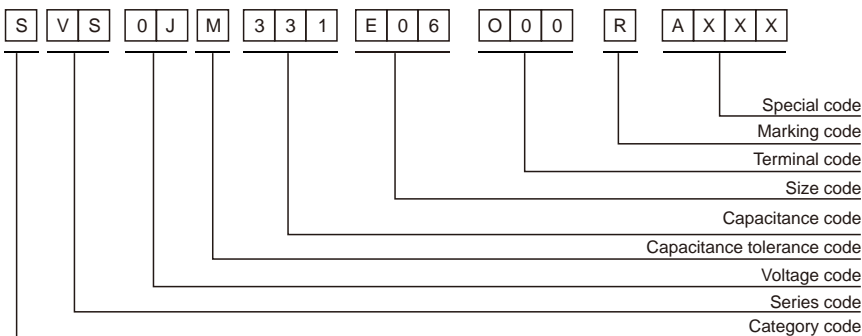
\*Note: If any doubt arises, measure the leakage current after the following voltage treatment.  
Voltage treatment: DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

### 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 DxD(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	6.3x6	18	2800	500	SVS0EM331E06E00RAXXX
	390	6.3x6	18	2900	500	SVS0EM391E06E00RAXXX
	470	6.3x6	18	4000	500	SVS0EM471E06E00RAXXX
	560	6.3x6	18	4000	500	SVS0EM561E06E00RAXXX
	680	6.3x9	13	4500	500	SVS0EM681E09E00RAXXX
6.3 (7.2)	220	6.3x6	18	2900	500	SVS0JM221E06E00RAXXX
	270	6.3x6	18	3100	500	SVS0JM271E06E00RAXXX
	330	6.3x6	18	3200	500	SVS0JM331E06E00RAXXX
	470	6.3x9	13	3600	592	SVS0JM471E09E00RAXXX
	560	6.3x9	13	3800	706	SVS0JM561E09E00RAXXX
	1000	8x11.5	13	4500	1260	SVS0JM102FBRE00RAXXX
	1500	8x11.5	13	4600	1890	SVS0JM152FBRE00RAXXX
2200	10x12.5	13	5800	2772	SVS0JM222GCRE00RAXXX	
10 (11.5)	68	6.3x6	45	2800	500	SVS1AM680E06E00RAXXX
	120	6.3x6	27	2800	500	SVS1AM121E06E00RAXXX
	220	6.3x6	27	2800	500	SVS1AM221E06E00RAXXX
		6.3x9	18	3100	500	SVS1AM221E09E00RAXXX
	330	6.3x9	18	3200	660	SVS1AM331E09E00RAXXX
		6.3x9	27	3500	940	SVS1AM471E09E00RAXXX
	560	8x11.5	18	3700	1120	SVS1AM561FBRE00RAXXX
		10x12.5	18	5200	1120	SVS1AM561GCRE00RAXXX
	1000	8x11.5	13	4400	2000	SVS1AM102FBRE00RAXXX
		10x12.5	13	4600	2000	SVS1AM102GCRE00RAXXX
	1500	10x12.5	13	4600	3000	SVS1AM152GCRE00RAXXX
16 (18.4)	47	6.3x6	36	1700	500	SVS1CM470E06E00RAXXX
	68	6.3x6	36	2100	500	SVS1CM680E06E00RAXXX
	100	6.3x6	27	2500	500	SVS1CM101E06E00RAXXX
	150	6.3x6	27	2500	500	SVS1CM151F06E00RAXXX
		6.3x9	22	2700	500	SVS1CM151F09E00RAXXX
	180	6.3x6	54	2600	576	SVS1CM181E06E00RAXXX
		6.3x9	22	2800	576	SVS1CM181E09E00RAXXX
	220	6.3x9	22	2600	704	SVS1CM221E09E00RAXXX
		6.3x9	22	2700	864	SVS1CM271E09E00RAXXX
	270	8x9.5	22	2900	864	SVS1CM271F9E00RAXXX
		6.3x9	22	2700	1056	SVS1CM331E09E00RAXXX
	330	8x11.5	18	4200	1056	SVS1CM331FBRE00RAXXX
		10x12.5	18	5200	1056	SVS1CM331GCRE00RAXXX
	560	8x11.5	18	3600	1792	SVS1CM561FBRE00RAXXX
	680	10x12.5	18	4200	2176	SVS1CM681GCRE00RAXXX
1000	10x12.5	18	4300	3200	SVS1EM102GCRE00RAXXX	
25 (28.8)	27	6.3x6	45	1100	500	SVS1EM270E06E00RAXXX
	47	6.3x6	45	1800	500	SVS1EM470E06E00RAXXX
		6.3x9	31	2100	500	SVS1EM470E09E00RAXXX
	56	6.3x6	45	1800	500	SVS1EM560E06E00RAXXX
	68	6.3x6	45	1800	500	SVS1EM680E06E00RAXXX
		6.3x9	27	2500	500	SVS1EM101E09E00RAXXX
	100	6.3x6	45	2200	500	SVS1EM101E06E00RAXXX
		6.3x9	27	2600	750	SVS1EM151E09E00RAXXX
	220	6.3x9	27	2600	1100	SVS1EM221E09E00RAXXX
		8x11.5	27	2700	1100	SVS1EM221FBRE00RAXXX
	330	10x12.5	19	2900	1650	SVS1EM331GCRE00RAXXX
		8x11.5	27	2800	1650	SVS1EM331FBRE00RAXXX
	470	8x11.5	27	2900	2350	SVS1EM471FBRE00RAXXX
		10x12.5	19	3200	2350	SVS1EM471GCRE00RAXXX
	560	10x12.5	19	3400	2800	SVS1EM561GCRE00RAXXX
	680	10x12.5	19	3400	3400	SVS1EM681GCRE00RAXXX

Specifications subject to change without notice.