



• Specifications

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	2.5 to 50Vdc	
Capacitance range	18 to 2,700μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of Standard Ratings (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of Standard Ratings	
Characteristics of impedance	$Z_{+105^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$, $Z_{-55^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$ at 100kHz	
Endurance	105°C, 20,000 hrs at rated voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Damp Heat (Steady State)	60°C, 90 to 95% RH, 1,000 hrs, No-applied Voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Resistance to soldering heat	VPS (230°C, 75s)	
	Appearance	No significant damage
	Capacitance change	Within±10% of the initial value
	Tangent of loss angle (tanδ)	≤130% of the initial specified value
	ESR(mΩ)	≤130% of the initial specified value
	Leakage current	≤The initial specified value

*In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

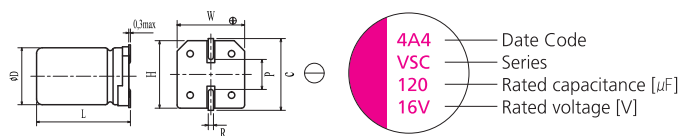
• Size List

(unit: mm)

RV (SV) μF	2.5 (2.9)	4 (4.6)	6.3 (7.2)	16 (18.4)	20 (23.0)	25 (28.7)	35 (40.2)	50 (57.5)
18								8×6.9
22				5×5.9				
39				6.3×5.9			8×6.9	8×11.9
47			5×5.9					
68								10×12.6
82				8×6.9			8×11.9	
100			5×5.9	6.3×5.9		8×6.9		
120				8×6.9			10×12.6	
180					8×6.9	8×11.9		
220			6.3×5.9					
270				8×6.9				
330			6.3×5.9			10×12.6		
390			8×6.9		8×11.9			
470					10×12.6			
560	6.3×5.9	8×6.9		8×11.9	10×12.6			
680	8×6.9							
820			8×11.9					
100				10×12.6				
1500	8×11.9	8×11.9						
2700	10×12.6							

RV: Rated Voltage [V] SV: Surge Voltage [V] (at room temperature)

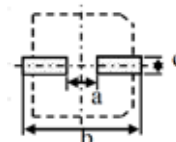
• Marking and Dimensions



(unit: mm)

Size	ØD±0.5	L+0.1 -0.4	W±0.2	H±0.2	C±0.2	R	P±0.2
5×5.9	5.0	5.9	5.3	5.3	6.0	0.6~0.8	1.4
6.3×5.9	6.3	5.9	6.6	6.6	7.3	0.6~0.8	2.1
8×6.9	8.0	6.9	8.3	8.3	9.0	0.6~0.8	3.2
8×11.9	8.0	11.9	8.3	8.3	9.0	0.8~1.1	3.2
10×12.6	10.0	12.6	10.3	10.3	11.0	0.8~1.1	4.6

• Recommended Land Pattern Dimension of PCB



(unit: mm)

Size	a	b	c
5×5.9	1.4	7.4	1.6
6.3×5.9	2.1	9.1	1.6
8×6.9	2.8	11.1	1.9
8×11.9	2.8	11.1	1.9
10×12.6	4.3	13.1	1.9

• Standard Ratings

Rated Voltage [Vdc]	Rated Capacitance [μF]	Size ØD x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (105°C, 100kHz) [mA _{rms}]	Tangent of Loss Angel [max]	Leakage Current [μA, max]	Part Number
2.5	560	6.3 x 5.9	16	3500	0.12	300	2VSC560MC6
	680	8 x 6.9	20	3370	0.12	500	2VSC820MD7
	1500	8 x 11.9	10	5150	0.12	750	2VSC1500MD12
	2700	10 x 12.6	12	5070	0.12	1350	2VSC2700ME12
4	560	8 x 6.9	22	3220	0.12	500	4VSC560MD7
	1500	8 x 11.9	12	4700	0.12	1200	4VSC1500MD12
6.3	47	5 x 5.9	30	1970	0.12	300	6VSC47MB6
	100	5 x 5.9	25	2150	0.12	300	6VSC100MB6
	220	6.3 x 5.9	22	2570	0.12	300	6VSC220MC6
	330	6.3 x 5.9	15	3390	0.12	415	6VSC330MC6
	390	8 x 6.9	22	3220	0.12	491	6VSC390MD7
	820	8 x 11.9	12	4700	0.12	1033	6VSC820MD12
16	22	5 x 5.9	50	1060	0.12	300	16VSC22MB6
	39	6.3 x 5.9	37	2050	0.12	300	16VSC39MC6
	82	8 x 6.9	30	2760	0.12	300	16VSC82MD7
	100	6.3 x 5.9	24	2490	0.12	320	16VSC100MC6
	120	8 x 6.9	27	2900	0.12	500	16VSC120MD7
	270	8 x 6.9	22	3300	0.12	864	16VSC270MD7
	560	8 x 11.9	14	4950	0.12	1792	16VSC560MD12
	1000	10 x 12.6	12	5400	0.12	3200	16VSC1000ME12
20	180	8 x 6.9	25	3200	0.12	720	20VSC180MD7
	390	8 x 11.9	14	4950	0.12	1560	20VSC390MD12
	470	10 x 12.6	15	5000	0.12	1880	20VSC470ME12
	560	10 x 12.6	12	5400	0.12	2240	20VSC560ME12
	100	8 x 6.9	24	3200	0.12	410	25VSC82MD7
25	180	8 x 11.9	16	4650	0.12	900	25VSC180MD12
	330	10 x 12.6	14	5000	0.12	1650	25VSC330ME12
	39	8 x 6.9	30	2800	0.12	273	35VSC39MD7
35	82	8 x 11.9	20	4000	0.12	574	35VSC82MD12
	120	10 x 12.6	18	4400	0.12	840	35VSC120ME12
50	18	8 x 6.9	35	2700	0.12	180	50VSC18MD7
	39	8 x 11.9	25	3800	0.12	390	50VSC39MD12
	68	10 x 12.6	15	4300	0.12	680	50VSC68ME12