

VSC

Surface mount type
series

- Super low ESR, High ripple current
- Load life of 20,000h at 105°C



SPECIFICATIONS

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	4 to 16Vdc	
Capacitance range	22 to 560μF	
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°C} /Z _{+20°C} ≤ 1.25, Z _{-55°C} /Z _{+20°C} ≤ 1.25 at 100kHz	
Endurance	105°C, 10,000 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

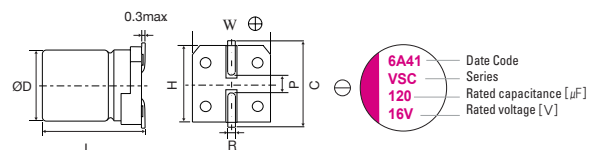
SIZE LIST

(unit : mm)

μF	RV(SV)	4 (5.2)	6.3 (8.2)	10 (11.5)	16 (18.4)
22					5 x 5.9
33				5 x 5.9	
39					6.3 x 5.9
47			5 x 5.9		
82					8 x 6.9
100			5 x 5.9		
120				6.3 x 5.9	8 x 6.9
220			6.3 x 5.9		
560		8 x 6.9			

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

MARKING AND DIMENSIONS



(unit : mm)

Size	Φ D±0.5	L ^{+0.1} _{-0.4}	W±0.2	H±0.2	C±0.2	R	P±0.2
5 x 5.9	5	5.9	5.3	5.3	6	0.6 to 0.8	1.4
6.3 x 5.9	6.3	5.9	6.6	6.6	7.3	0.6 to 0.8	2.1
8 x 6.9	8	6.9	8.3	8.3	9	0.6 to 0.8	3.2

RECOMMENDED LAND PATTERN DIMENSION OF PCB

(unit : mm)

Size	a	b	c
5 x 5.9	1.4	7.4	1.6
6.3 x 5.9	2.1	9.1	1.6
8 x 6.9	2.8	11.1	1.9

Conductive Polymer Aluminum Capacitors

STANDARD RATINGS

Rated Voltage [Vdc]	Rated Capacitance [μ F]	Size Φ D x L [mm]	ESR (20°C, 100kHz) [$m\Omega$] [max.]	Rated Ripple Current (105°C, 100kHz) [mA _{rms}]	Tangent of Loss Angel [max.]	Leakage Current [μ A, max.]	Part Number
4	560	8 x 6.9	22	3220	0.1	500	4VSC560MD7
6.3	47	5 x 5.9	30	1970	0.1	300	6VSC47MB6
	100	5 x 5.9	25	2150	0.1	300	6VSC100MB6
	220	6.3 x 5.9	22	2570	0.1	300	6VSC220MC6
10	33	5 x 5.9	50	1100	0.1	300	10VSC33MB6
	120	6.3 x 5.9	27	2320	0.1	300	10VSC120MC6
16	22	5 x 5.9	50	1060	0.1	300	16VSC22MB6
	39	6.3 x 5.9	37	2050	0.1	300	16VSC39MC6
	82	8 x 6.9	30	2760	0.1	300	16VSC82MD7
	120	8 x 6.9	27	2900	0.1	500	16VSC120MD7

