



Surface mount type  
series

Lower ESR than VL series  
High ripple current  
Load life of 2,000h at 105°C



## • Specifications

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	2.5 to 16Vdc	
Capacitance range	30 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	$Z_{+105^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25, Z_{-55^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$ at 100kHz	
Endurance	105°C, 2,000 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

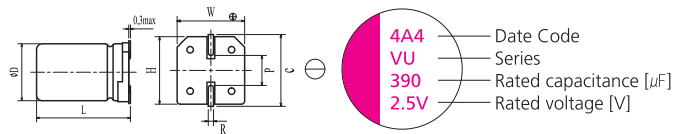
## • Size List

(unit: mm)

RV (SV) μF	2.5 (2.9)	4 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)
150			5×5.9		
180			5×5.9		6.3×9.9
220			6.3×5.9		
270	5×5.9				
330	5×5.9	6.3×5.9			
390	6.3×5.9				
470					
560	6.3×5.9				

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

## • Marking and Dimensions

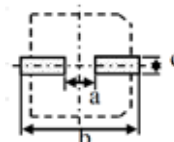


(unit: mm)

Size	∅D±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
6.3×9.9	6.3	9.9	6.6	6.6	7.3	0.6~0.8	2.1
10×12.6	10.0	12.6	10.3	10.3	11.0	0.8~0.11	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
6.3×9.9	2.1	9.1	1.6
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	270	5.0 x 5.9	10	3860	0.12	500	2VU270MB6
	330	5.0 x 5.9	10	3860	0.12	500	2VU330MB6
	390	5.0 x 5.9	10	3860	0.12	700	2VU390MB6
	390	6.3 x 5.9	10	3900	0.12	500	2VU390MC6
	560	6.3 x 5.9	10	3900	0.12	500	2VU560MC6
4	30	6.3 x 5.9	10	3900	0.12	500	4VU330MC6
6.3	150	5.0 x 5.9	12	3520	0.12	500	6VU150MB6
	180	5.0 x 5.9	15	3150	0.12	500	6VU180MB6
	220	6.3 x 5.9	10	3900	0.12	500	6VU220MC6
16	180	6.3 x 9.9	11	4460	0.12	576	16VU180MC10
	470	10 x 12.6	10	6100	0.12	1504	16VU470ME12