

VU series

Surface mount type

- 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	150 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

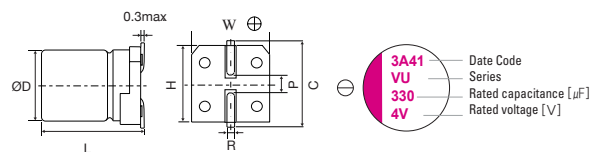
DIMENSIONS

(unit : mm)

μF	RV(SV)	2.5 (3.3)	4 (5.2)	6.3 (8.2)	16 (18.4)
150				5 x 5.9	
180				5 x 5.9	6.3 x 9.9
220				6.3 x 5.9	
270	5 x 5.9				
330	5 x 5.9	6.3 x 5.9			
390	5 x 5.9 6.3 x 5.9				
470					10 x 12.6
560	6.3 x 5.9				

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

MARKING AND SIZE LIST

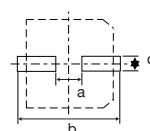


(unit : mm)

Size	ΦD±0.5	L ^{+0.1} _{-0.4}	W±0.2	H±0.2	C±0.2	R	P±0.2
5 x 5.9	5.0	5.9	5.3	5.3	6.0	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
6.3 x 9.9	6.3	9.9	6.6	6.6	7.3	0.6 to 0.8	2.1
10 x 12.6	10.0	12.6	10.3	10.3	11.0	0.8 to 1.1	4.6

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
6.3 x 9.9	2.1	9.1	1.6
10 x 12.6	4.3	13.1	1.9

Conductive Polymer Aluminum Capacitors

STANDARD RATINGS

Rated Voltage [Vdc]	Rated Capacitance [μF]	Size Φ D 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	330	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

