

## VU series

- Lower ESR than VL series
- High ripple current



### Specifications

Items	Characteristics	
Temperature range	-55°C ~ +105°C	
Rated voltage range	2.5Vdc	
Capacitance range	390μF ~ 560μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of STANDARD RATING (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of STANDARD RATING (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of STANDARD RATING	
Characteristics of impednace	$Z_{-105^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$ , $Z_{-55^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}} \leq 1.25$ 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
Damp Heat (Steady state)	60°C, 90 to 95% RH, 1000 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
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

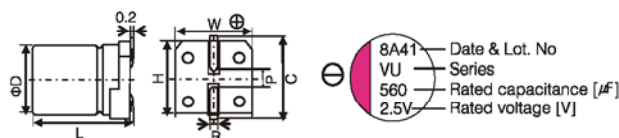
### Dimensions

(unit : mm)

RV (SV)	2.5(3.3)
390	6.3x5.7(5.8, 5.9)
560	6.3x5.7(5.8, 5.9)

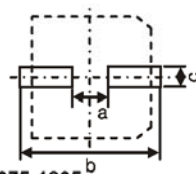
RV:Rated voltage [V] SV:Surge voltage [V] (at room temperature)

### Marking and Size list



Size	ΦD±0.5	L	+0.1 -0.4	W±0.2	H±0.2	C±0.2	R	P±0.2
6.3x5.7	6.3	(5.7±0.3)		6.6	6.6	7.3	0.6~0.8	2.1
6.3x5.8	6.3	(5.8±0.3)		6.6	6.6	7.3	0.6~0.8	2.1
6.3x5.9	6.3	5.9		6.6	6.6	7.3	0.6~0.8	2.1

### Recommended land pattern dimension of PCB



Size	a	b	c
6.3x5.7	2.1	9.1	1.6
6.3x5.8	2.1	9.1	1.6
6.3x5.9	2.1	9.1	1.6

## Standard ratings

Rated Voltage [Vdc]	Rated Capacitance [ $\mu$ F]	Size $\phi$ D x L [mm]	ESR (20°C, 100kHz) [m $\Omega$ ][max.]	Rated Ripple Current (105°C, 100kHz) [mA <sub>rms</sub> , max.]	Tangent of Loss Angle [max.]	Leakage Current [ $\mu$ A, max.]	Part Number
2.5	390	6.3x5.7	10	3870	0.10	500	2VU390MC5R7
	390	6.3x5.8	10	3870	0.10	500	2VU390MC5R8
	390	6.3x5.9	10	3870	0.10	500	2VU390MC6
	560	6.3x5.7	10	3870	0.10	500	2VU560MC5R7
	560	6.3x5.8	10	3870	0.10	500	2VU390MC5R8
	560	6.3x5.9	10	3870	0.10	500	2VU390MC6