

# VA series

## SMD High Voltage

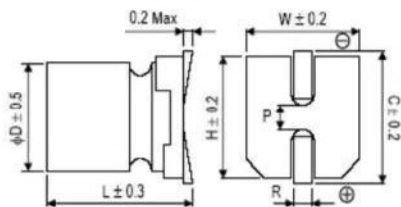
- SMD Type, High voltage
- Load life of 2000 hours at 105°C
- Compliant to the RoHS directive (2011/65/EU)

耐高压贴片固态产品，产品满足RoHS指令(2011/65/EU)。

### » Specifications

Items	Characteristics	
Operating Temp. Range	-55°C ~ +105°C	
Capacitance Range	15 ~ 820 $\mu$ F	
Capacitance Tolerance	M: $\pm$ 20%	
Rated Voltage Range	25V ~ 100V DC	
Dissipation Factor ( at 120Hz, 20°C )	Not to exceed the value specified Not to exceed the value specified (after 2 minutes)	
Leakage Current	Not to exceed the value specified	
ESR ( 100K~300KHz )	Capacitance Change	Within $\pm$ 20% of the value before test
	Leakage current	Not to exceed the value specified
Endurance 105°C, 2000h, at rated voltage	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
	Capacitance Change	Within $\pm$ 20% of the value before test
Moisture Resistance Stored at 60°C, Rh90 ~ 95%, 1000h	Leakage Current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

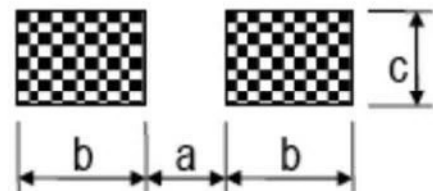
### » Diagram of Dimensions



Unit: mm

$\phi D \times L$	$\phi D$ +0.5max.	$\alpha$	F $\pm 0.5$	$\phi r$ $\pm 0.05$
6.3 x 7.7	6.6	6.6	0.5to0.8	2.1
6.3 x 9	6.6	6.6	0.5to0.8	2.1
6.3 x 10	6.6	6.6	0.5to0.8	2.1
8 x 9.2	8.3	8.3	0.8to1.1	3.2
8 x 12.2	8.3	8.3	0.8to1.1	3.2
10 x 10.5	10.3	10.3	0.8to1.1	4.6
10 x 12.7	10.3	10.3	0.8to1.1	4.6

### » Recommended land pattern



$\phi D \times L$	a	b	c
6.3 x 7.7	2.1	3.5	1.6
6.3 x 9	2.1	3.5	1.6
6.3 x 10	2.1	3.5	1.6
8 x 9.2	2.8	4.2	1.9
8 x 12.2	2.8	4.2	1.9
10 x 10.5	4.3	4.4	1.9
10 x 12.7	4.3	4.4	1.9

## » Capacitance List

W.V ( S.V )	25 ( 28.7 )	35 ( 41 )	50 ( 57.5 )	63 ( 72 )	80 ( 92 )	100 ( 115 )
SIZE						
6.3 × 7.7	120~180 uF	68~100 uF				
6.3 × 9	150~220 uF	82~120 uF				
6.3 × 10	180~270 uF	100~150 uF				
8 × 9.2	220~390 uF	120~220 uF				
8 × 12.2	330~560 uF	150~270 uF	68~100 uF	56~82 uF	39~56 uF	15~27 uF
10 × 10.5	330~560 uF	180~330 uF	82~150 uF	68~120 uF		
10 × 12.7	470~820 uF	220~470 uF	100~180 uF	82~150 uF	68~120 uF	27~47 uF

## » Characteristics List

W.V. (V)	Capacitance (uF)	L.C. (uA, 2min)	tg δ (120Hz, 20°C)	ESR (mΩ, 100kHz)	Rated Ripple Current (mA, r. m. s)	Size Φ D × L (mm)	Part Number
25	100	500	0.10	18	2900	6.3 × 7.7	VA101M025E077TR
	150	750	0.10	18	3100	6.3 × 9	VA151M025E090TR
	220	1100	0.10	18	3300	6.3 × 10	VA221M025E100TR
	330	1650	0.10	18	3400	8 × 9.2	VA331M025F092TR
	470	2350	0.10	15	4100	8 × 12.2	VA471M025F122TR
	560	2800	0.10	16	3900	10 × 10.5	VA561M025G105TR
	680	3000	0.10	15	4500	10 × 12.7	VA681M025G127TR
35	68	476	0.10	25	2400	6.3 × 7.7	VA680M035E077TR
	100	700	0.10	25	2500	6.3 × 9	VA101M035E090TR
	120	840	0.10	25	2700	6.3 × 10	VA121M035E100TR
	150	1050	0.10	20	3100	8 × 9.2	VA151M035F092TR
	220	1540	0.10	18	3400	8 × 12.2	VA221M035F122TR
	270	1890	0.10	20	3400	10 × 10.5	VA271M035G105TR
	330	2310	0.10	18	3700	10 × 12.7	VA331M035G127TR
50	100	1000	0.10	25	2500	8 × 12.2	VA101M050F122TR
	120	1200	0.10	25	2500	10 × 10.5	VA121M050G105TR
	150	1500	0.10	25	2900	10 × 12.7	VA151M050G127TR
63	68	856.8	0.10	25	2500	8 × 12.2	VA680M063F122TR
	100	1260	0.10	25	2500	10 × 10.5	VA101M063G105TR
	120	1512	0.10	25	2900	10 × 12.7	VA121M063G127TR
80	47	752	0.10	40	1900	8 × 12.2	VA470M080F122TR
	100	1600	0.10	35	2400	10 × 12.7	VA101M080G127TR
100	22	440	0.10	40	1900	8 × 12.2	VA220M100F122TR
	33	660	0.10	35	2400	10 × 12.7	VA330M100G127TR

## » Frequency Coefficient for Ripple Current

Frequency	120Hz ≤ freq. < 1KHz	1KHz ≤ freq. < 10KHz	10KHz ≤ freq. < 100KHz	100KHz ≤ freq. < 300KHz
Coefficient	0.05	0.3	0.7	1