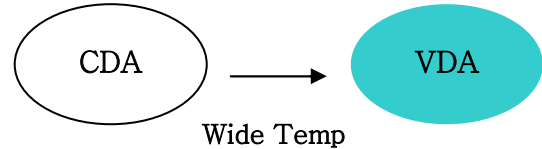


## VDA Series

● 150°C 1,000Hrs assured

- Vertical SMD type
- Wide Temperature range
- For ECU, ESA
- Ecological capacitors are also available.

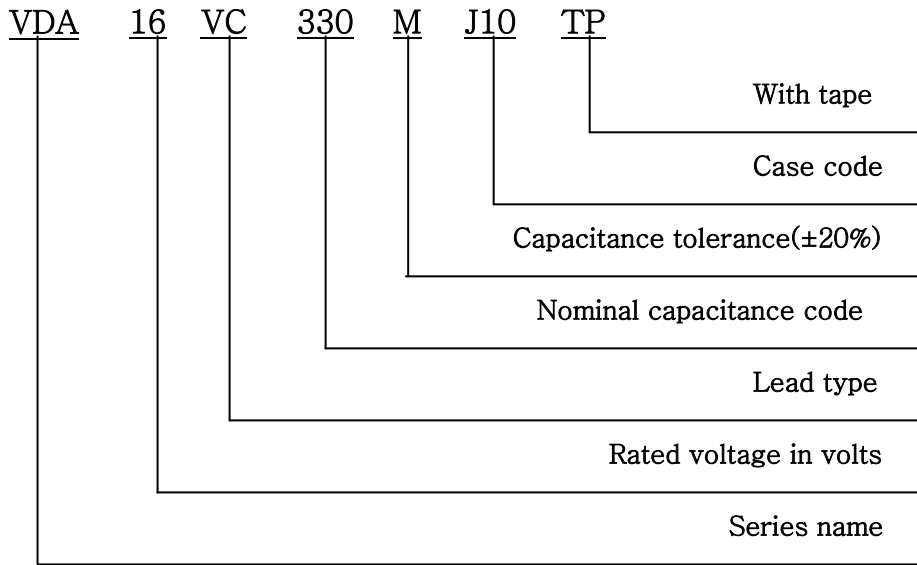
Solvent-  
proof



## SPECIFICATIONS

Item	Characteristics					
Rated Voltage Range	10 ~ 50 V <sub>DC</sub>					
Operating Temperature Range	-40 ~ +150°C					
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)					
Leakage Current	I = 0.01CV(μA) or 3μA, whichever is greater Where, I : Max. Leakage current(μA), C : Nominal capacitance(μF), V: Rated voltage(V <sub>DC</sub> ) (at 20°C, 2 minutes)					
Dissipation Factor Tanδ(Max.)	Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50
	Tanδ(Max.)	0.24	0.20	0.16	0.14	0.14
(at 20°C, 120Hz)						
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50
	Z(-25°C) / Z(+20°C)	6	4	3	2	2
	Z(-40°C) / Z(+20°C)	12	10	8	6	6
(at 120Hz)						
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 150°C. Capacitance change ≤ ± 30% of the initial value Tanδ ≤ 300% of the initial specified value Leakage current ≤ The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 150°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤ ± 30% of the initial value Tanδ ≤ 300% of the initial specified value Leakage current ≤ The initial specified value					
Others	Satisfied characteristics W of KS C 6421					

## PART NUMBERING SYSTEM

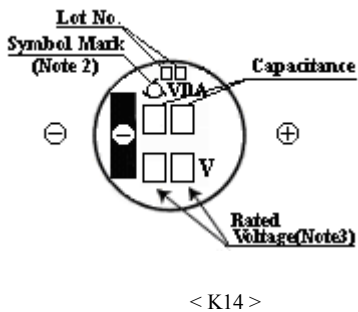
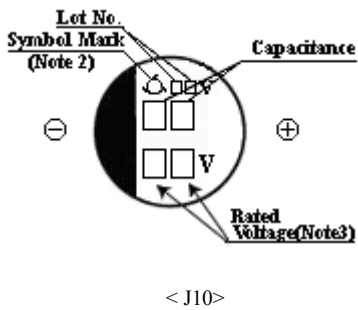


Capacitance	Code
0.1 $\mu\text{F}$	R1
0.47 $\mu\text{F}$	R47
1.0 $\mu\text{F}$	1
4.7 $\mu\text{F}$	4R7
10 $\mu\text{F}$	10
100 $\mu\text{F}$	100

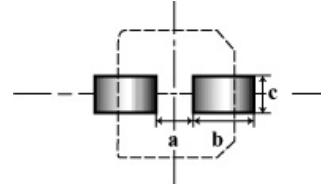
## DIMENSIONS OF VDA Series (Type :VC)

### DIMENSIONS

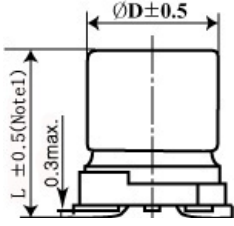
#### Marking



### Recommended solder land on PC board



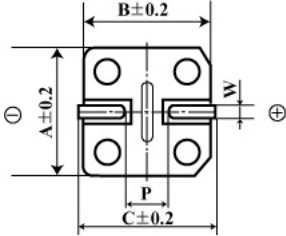
 Solder land on PC board



Note 1 : L + 0.3 for 6.3 x 5.7(F60)

Note 2 : Case Color ; Clarity Green

Case code	Ø D	L	A	B	C	W	P	a	b	c
J10	10	10	10.3	10.3	11.0	0.7~1.1	4.5	4.5	4.4	2.2
K14	12.5	13.5	13.0	13.0	13.7	1.0~1.3	4.2	4.0	5.7	2.5



### RATINGS OF VDA Series

V <sub>DC</sub> / μF	10(1A)		16(1C)		25(1E)		35(1V)		50(1H)	
	47							J10	90	J10
100					J10	123	J10	132	K14	167
220			J10	163	J10	183	K14	249		
330	J10	183	J10	200	K14	285				
470	J10	218	K14	304						
1,000	K14	405								

▲ Rated ripple Current (mArms/150°C, 120Hz)

▲ Case Code