

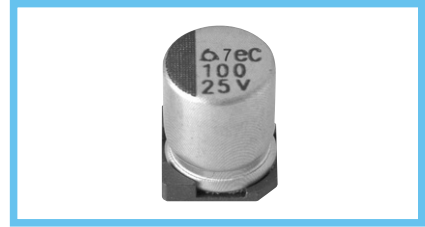
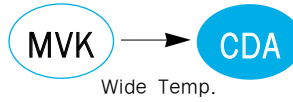
CDA Series

• 125°C 1,000~2,000Hrs assured.

- Vertical SMD type.
- Wide Temperature range.
- For ECU, ESA
- RoHS compliant.

Solvent-proof

WV ≤ 80V_{DC}

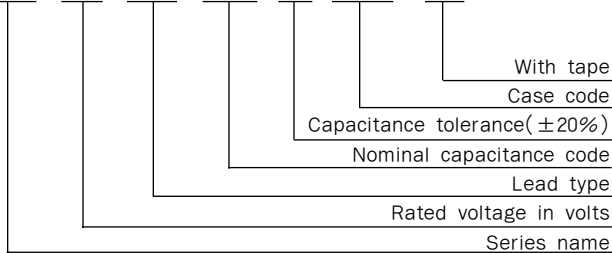


SPECIFICATIONS

Item	Characteristics																									
Rated Voltage Range	6.3 ~ 400 V _{DC}																									
Operating Temperature Range	-40 ~ +125°C																									
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																									
Leakage Current	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Rated Voltage(V_{DC})</td> <td style="width: 33%;">6.3 ~ 80</td> <td style="width: 33%;">160 ~ 400</td> </tr> <tr> <td>Max. Leakage current(μA)</td> <td>I=0.01CV(μA) or 3μA, whichever is greater. (at 20°C, 2 minutes)</td> <td>0.04CV+100(μA) (at 20°C, 2 minutes)</td> </tr> </table> <p style="text-align: center; font-size: small;">Where, C:Nominal capacitance(μF), V:Rated voltage(V_{DC})</p>	Rated Voltage(V _{DC})	6.3 ~ 80	160 ~ 400	Max. Leakage current(μA)	I=0.01CV(μA) or 3μA, whichever is greater. (at 20°C, 2 minutes)	0.04CV+100(μA) (at 20°C, 2 minutes)																			
Rated Voltage(V _{DC})	6.3 ~ 80	160 ~ 400																								
Max. Leakage current(μA)	I=0.01CV(μA) or 3μA, whichever is greater. (at 20°C, 2 minutes)	0.04CV+100(μA) (at 20°C, 2 minutes)																								
Dissipation Factor Tanδ(Max.)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Rated voltage(V_{DC})</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~80</td> <td>160~250</td> <td>400</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.16</td> <td>0.18</td> <td>0.20</td> <td>0.24</td> </tr> </table> <p style="text-align: right; font-size: small;">(at 20°C, 120Hz)</p>		Rated voltage(V _{DC})	6.3	10	16	25	35	50	63~80	160~250	400	Tanδ(Max.)	0.28	0.24	0.20	0.16	0.14	0.16	0.18	0.20	0.24				
Rated voltage(V _{DC})	6.3	10	16	25	35	50	63~80	160~250	400																	
Tanδ(Max.)	0.28	0.24	0.20	0.16	0.14	0.16	0.18	0.20	0.24																	
Temperature Characteristics (Max. Impedance ratio)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Rated voltage(V_{DC})</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35~80</td> <td>160~250</td> <td>400</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>6</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>6</td> <td>10</td> </tr> </table> <p style="text-align: right; font-size: small;">(at 120Hz)</p>		Rated voltage(V _{DC})	6.3	10	16	25	35~80	160~250	400	Z(-25°C)/Z(+20°C)	6	4	3	2	2	3	6	Z(-40°C)/Z(+20°C)	12	10	8	6	4	6	10
Rated voltage(V _{DC})	6.3	10	16	25	35~80	160~250	400																			
Z(-25°C)/Z(+20°C)	6	4	3	2	2	3	6																			
Z(-40°C)/Z(+20°C)	12	10	8	6	4	6	10																			
Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied with the following conditions.</p> <p style="text-align: center; font-size: small;">∅ 4~∅ 6.3 : 125°C, 1,000 hours, ∅ 8~∅ 18 : 125°C, 2,000 hours.</p> <p>Capacitance change ≤ ±30% of the initial value</p> <p>Tanδ ≤ 300% of the initial specified value</p> <p>Leakage current ≤ The initial specified value</p>																									
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for the specified time at 125°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 measurement.</p> <p style="text-align: center; font-size: small;">∅ 4~∅ 6.3 : 125°C, 500 hours, ∅ 8~∅ 18 : 125°C, 1,000 hours.</p> <p>Capacitance change ≤ ±30% of the initial value</p> <p>Tanδ ≤ 300% of the initial specified value</p> <p>Leakage current ≤ The initial specified value(whence, 500% for ≥ WV160V_{DC})</p>																									
Others	Satisfied characteristics W of KS C 6421																									

PART NUMBERING SYSTEM

CDA 25 VC 100 M H10 TP



Capacitance	Code
0.1μF	R1
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100



SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

DIMENSIONS OF CDA Series(Type : VC)

Unit(mm)

DIMENSIONS

<Size code:D55~M22> ● Vibration Resistance
<Size code:L17~M22>

■ : Dummy terminals

Recommended solder land on PC board

■ : Solder land on PC board

MARKING

<D55~J10> <K14~M22>

Note 1 : L±0.5 for 8×6.3(H63), 8×10(H10), 10×10(J10), 12.5×13.5(K14)
 Note 2 : 4×5.2(D55), 5×5.2(E55) is excluded symbol mark
 Note 3 : 6.3WV is marked by 6V

Case code	φD	L	A	B	C	W	P	a	b	c	a	b	c
D55	4	5.2	4.3	4.3	5.1	0.5~0.8	1.0	1.0	2.6	1.6			
E55	5	5.2	5.3	5.3	5.9	0.5~0.8	1.4	1.4	3.0	1.6			
F55	6.3	5.2	6.6	6.6	7.2	0.5~0.8	1.9	1.9	3.5	1.6			
F60	6.3	5.7	6.6	6.6	7.2	0.5~0.8	1.9	1.9	3.5	1.6			
H63	8	6.3	8.3	8.3	9.0	0.5~0.8	2.3	2.3	4.5	1.6			
H10	8	10	8.3	8.3	9.0	0.7~1.1	3.1	3.1	4.2	2.2			
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			
L17	16	16.5	17.0	17.0	18.0	1.0~1.3	6.5	6.0	6.9	2.5	4.7	7.8	9.6
L22	16	21.5	17.0	17.0	18.0	1.0~1.3	6.5	6.0	6.9	2.5			
M17	18	16.5	19.0	19.0	20.0	1.0~1.3	6.5	6.0	7.9	2.5	4.7	8.8	9.6
M22	18	21.5	19.0	19.0	20.0	1.0~1.3	6.5	6.0	7.9	2.5			

● Vibration Resistance → ↑

RATINGS OF CDA Series

V _{dc} μF	6.3(OJ)	10(1A)	16(1C)	25(1E)	35(1V)	50(1H)	63(1J)	80(1K)
4.7					D55 10	F55 11	F60 15	H63 18
10			D55 8	E55 13	F60 18	F60 18	H63 22	H10 25
22	D55 11	E55 15	E55 15	F55 20	F60 26	H63 28	H10 37	J10 40
33	E55 17	E55 17	F55 22	F60 30	H63 41	H10 50	J10 58	J10 58
47	E55 19	F55 24	F60 28	H63 45	H10 61	J10 70	J10 70	K14 180
100	F60 28	H63 48	H63 50	H10 84	J10 101	K14 250	K14 250	L17 268
220	H63 75	H10 91	H10 100	J10 141	K14 320	L17 372	L17 372	M17 417
330	H10 100	J10 125	J10 145	K14 380	L17 420	L17 455	L17 455	
470	J10 150	J10 150	K14 430	L17 463	M17 510	M17 570	L22 570	
1,000	K14 480	K14 480	M17 653	M22 788				
2,200		L17 726						
3,300		M17 930						
4,700		M22 1,237						

V _{dc} μF	160(2C)	200(2D)	250(2E)	400(2G)
1				J10 18
2.2				J10 26
3.3				J10 37
4.7				K14 70
10	K14 100	K14 100	L17 120	L22 140
22	L17 180	L17 180	M17 205	
33	M17 245	M17 245	M22 260	
47	M22 315	M22 315		
68	M22 380			

Rated Ripple Current (mA rms/ 125°C, 120Hz)

Case code