

## ALUMINUM ELECTROLYTIC CAPACITORS



### CEE Series

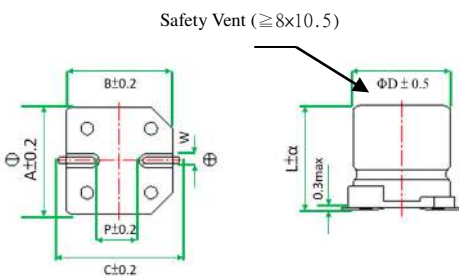
- Extra Low impedance
- Load life 2,000~5,000 hours at 105°C



#### ◆ SPECIFICATIONS

Item	Performance Characteristics															
Category Temperature Range	-55 ~ +105°C															
Working Voltage Range	50 ~ 100Vdc															
Capacitance Range	3.3 ~ 470 μF															
Capacitance Tolerance	±20% (at 25°C and 120Hz)															
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ(Max) Ø4-Ø10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.07</td> </tr> <tr> <td>Ø12.5</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.07</td> </tr> </tbody> </table>	Rated Voltage (V)	50	63	80	100	tanδ(Max) Ø4-Ø10	0.10	0.08	0.08	0.07	Ø12.5	0.10	0.08	0.08	0.07
	Rated Voltage (V)	50	63	80	100											
tanδ(Max) Ø4-Ø10	0.10	0.08	0.08	0.07												
Ø12.5	0.10	0.08	0.08	0.07												
Leakage Current	(Ø6.3~Ø10) I=0.01CV or 3μA whichever is greater impress the rated voltage for 2 minutes. (Ø12.5) I=0.03CV or 4μA whichever is greater impress the rated voltage for 1 minutes. I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V)															
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-55°C)/Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated voltage (V)	50	63	80	100	Z(-25°C)/Z(+20°C)	2	2	2	2	Z(-55°C)/Z(+20°C)	3	3	3	3
	Rated voltage (V)	50	63	80	100											
	Z(-25°C)/Z(+20°C)	2	2	2	2											
Z(-55°C)/Z(+20°C)	3	3	3	3												
	(at 120Hz)															
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated voltage is applied for 5,000 hours (Ø4~6.3x5.8, Ø6.3x7.7, Ø8x6.2 for 2,000 hours) at 105°C															
	<table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>≅ ±30% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 300% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> </tr> </tbody> </table>	Capacitance change	≅ ±30% of the initial value	Dissipation factor(tanδ)	≅ 300% of the specified value	Leakage current	≅ specified value									
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Leakage current	≅ specified value															
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 105°C without voltage applied.															
	<table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>≅ ±30% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 300% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 200% of the specified value</td> </tr> </tbody> </table>	Capacitance change	≅ ±30% of the initial value	Dissipation factor(tanδ)	≅ 300% of the specified value	Leakage current	≅ 200% of the specified value									
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Leakage current	≅ 200% of the specified value															
Others	Conforms to JIS-C-5101-4 (1998), characteristic W															

#### ◆ DIMENSIONS (mm)



Code	Size	ΦD	L	α	A	B	C	W	P
0458	4x5.8	4	5.8	+0.4 -0.1	4.3	4.3	4.8	0.5~0.8	1
0558	5x5.8	5	5.8	+0.4 -0.1	5.3	5.3	5.8	0.5~0.8	1.3
6358	6.3x5.8	6.3	5.8	+0.4 -0.1	6.6	6.6	7.3	0.5~0.8	2.1
6377	6.3x7.7	6.3	7.7	±0.3	6.6	6.6	7.3	0.5~0.8	2.1
0862	8x6.2	8	6.2	+0.4 -0.1	8.3	8.3	8.8	0.5~0.8	2.2
08A5	8x10.5	8	10.5	0.5	8.3	8.3	9.1	0.8~1.2	3.1
10A5	10x10.5	10	10.5	0.5	10.3	10.3	11	0.8~1.2	4.6
10C5	10x12.5	10	12.5	0.5	10.3	10.3	11	0.8~1.2	4.6
12D5	12.5x13.5	12.5	13.5	1.0	12.8	12.8	13.8	0.8~1.2	4.6
1216	12.5x16	12.5	16	1.0	12.8	12.8	13.8	0.8~1.2	4.6

#### ◆ Marking

≤ 6.3 Φ



≥ 8 Φ



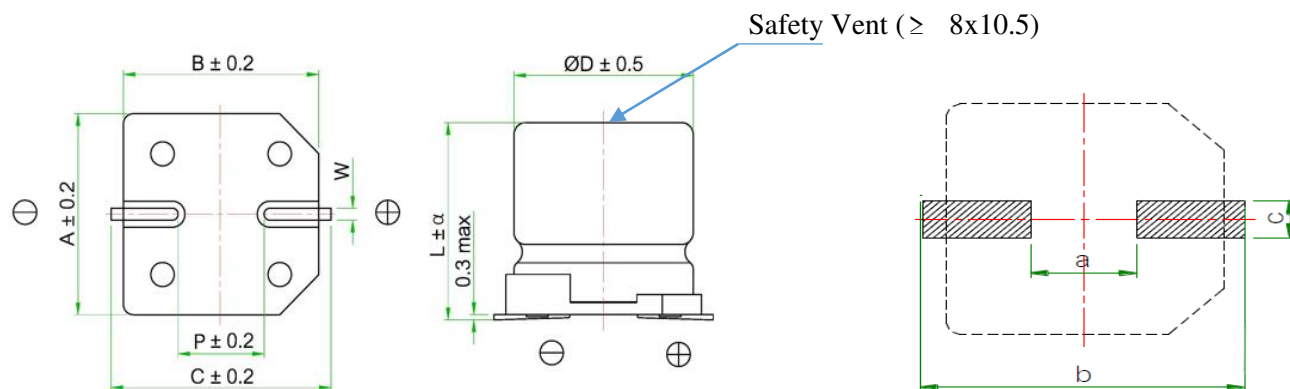
## Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	CEE	NO.:	PUBLISH DATE	2022-03-28
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1、Tape & Reel (TR)\ Cut Tape (CT)\ Digi-Reel.

2、Diagram of Dimensions (unit : mm.), and Recommended soldering pad dimensions.

Size Code	ΦD	L	A	B	C	W	P	α	a	b	c
0862	8	6.2	8.3	8.3	8.8	0.5~0.8	2.2	0.4/-0.1	2.1	10.1	1.6
08A5	8	10.5	8.3	8.3	9.1	0.8~1.2	3.1	0.5	3.0	11.0	2.5
1010	10	10.0	10.3	10.3	11.0	0.8~1.2	4.6	0.5	4.0	12.0	2.5
10A5	10	10.5	10.3	10.3	11.0	0.8~1.2	4.6	0.5	4.0	12.0	2.5
12D5	12.5	13.5	12.8	12.8	13.8	0.8~1.2	4.6	1.0	4.0	15.4	3.0



No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	Impedance @20°C (Ω max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
														DΦ	L	a	d	P	
1	CEE1A102MCB10A5		1000	±20%	10		-55° C ~ 105° C	0.19	100		850mA @ 100 kHz	0.09 Ω	5000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	



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2	CEE1C471MCB08A5		470	±20%	16		-55° C ~ 105° C	0.16	75.2		600mA @ 100 kHz	0.17 Ω	5000 Hrs @ 105° C	8.0mm	10.5mm			3.1mm	
3	CEE1C681MCB1010F2M9		680	±20%	16		-55° C ~ 105° C	0.16	108.8		850mA @ 100 kHz	0.09 Ω	2000 Hrs @ 105° C	10.0mm	10.0mm			4.6mm	
4	CEE1E221MCB08A5F2		220	±20%	25		-55° C ~ 105° C	0.14	55		600mA @ 100 kHz	0.17 Ω	2000 Hrs @ 105° C	8.0mm	10.5mm			3.1mm	
5	CEE1E471MCB10A5		470	±20%	25		-55° C ~ 105° C	0.14	117.5		850mA @ 100 kHz	0.09 Ω	5000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	
6	CEE1E471MCB10A5F2		470	±20%	25		-55° C ~ 105° C	0.14	117.5		850mA @ 100 kHz	0.09 Ω	2000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	
7	CEE1H221MCB10A5		220	±20%	50		-55° C ~ 105° C	0.10	110		670mA @ 100 kHz	0.18 Ω	5000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	
8	CEE1J220MCB0862		22	±20%	63		-55° C ~ 105° C	0.08	13.86		120mA @ 100 kHz	1.2 Ω	2000 Hrs @ 105° C	8.0mm	6.2mm			2.2mm	
9	CEE1J221MCB12D5		220	±20%	63		-55° C ~ 105° C	0.08	415.8		800mA @ 100 kHz	0.16 Ω	5000 Hrs @ 105° C	12.5mm	13.5mm			4.6mm	
10	CEE1V331MCB10A5		330	±20%	35		-55° C ~ 105° C	0.12	115.5		850mA @ 100 kHz	0.16 Ω	5000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
	李科高	张铭仁	聂婷