



Chinsan Electronic  
Since 1970

# Taiwan Chinsan Electronic Ind., Co., Ltd.

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<http://www.chinsan.com/products/>

## ALUMINUM ELECTROLYTIC CAPACITORS



### CTB Series

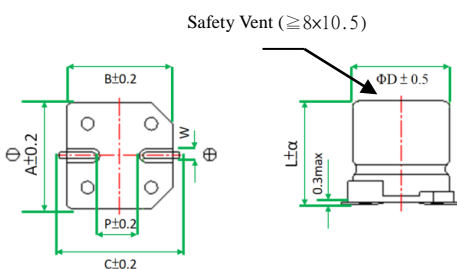
- Standard Series at 105°C
- Load life 2,000 hours at 105°C



#### ◆ SPECIFICATIONS

Item	Performance Characteristics																																											
Category Temperature Range	-40 ~ +105°C																																											
Working Voltage Range	4 ~ 100Vdc																																											
Capacitance Range	0.1 ~ 6,800 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>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ(Ma×)</td> <td>0.35</td> <td>0.30</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> </tr> <tr> <td></td> <td>0.42</td> <td>0.38</td> <td>0.34</td> <td>0.30</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>	Rated Voltage (V)	4	6.3	10	16	25	35	50	63	100	tanδ(Ma×)	0.35	0.30	0.24	0.20	0.16	0.14	0.14	0.12	0.12		0.42	0.38	0.34	0.30	0.26	0.22	0.18	0.14	0.12													
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The above values should be increased by 0.02 for every additional 1000μF																																												
Leakage Current	(Ø4~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 minute. I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V)																																											
Low Temperature Characteristics Impedance Ratio(MA×)	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50~63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Ø6.3~Ø10</td> <td>Z(-25°C)/Z(+20°C)</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>4</td> </tr> <tr> <td rowspan="2">Ø12.5</td> <td>Z(-25°C)/Z(+20°C)</td> <td>7</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>17</td> <td>12</td> <td>10</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> </tr> </tbody> </table>	Rated voltage (V)	4	6.3	10	16	25	35	50~63	100	Ø6.3~Ø10	Z(-25°C)/Z(+20°C)	7	4	3	2	2	2	3	Z(-40°C)/Z(+20°C)	15	8	6	4	4	3	4	Ø12.5	Z(-25°C)/Z(+20°C)	7	5	4	3	2	2	2	Z(-40°C)/Z(+20°C)	17	12	10	8	5	4	3
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(at 120Hz)																																												
Endurance	The following specifications shall be satisfied when the capacitor are restored to 25°C after subjected to DC voltage with the rated voltage is applied for 2,000 hours (Ø4~6.3×5.8 for 1,000 hours) at 105°C																																											
	<table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>≅ ±20% of the initial value (≅ ±30% of the initial value of 4V or less)</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> </tr> </tbody> </table>	Capacitance change	≅ ±20% of the initial value (≅ ±30% of the initial value of 4V or less)	Dissipation factor(tanδ)	≅ 200% of the specified value	Leakage current	≅ specified value																																					
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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.																																											
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Others	Conforms to JIS-C-5101-4 (1998), characteristic W																																											

#### ◆ DIMENSIONS (mm)



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

#### ◆ Marking

≅ 6.3Φ



≅ 8Φ

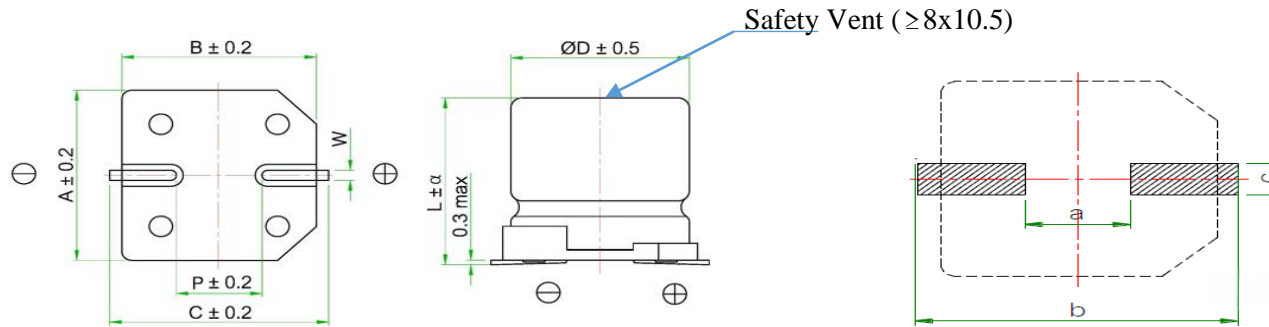


## Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	CTB	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
0458	4.0	5.8	4.3	4.3	5.0	0.5~0.8	1.0	0.4/-0.1	1.0	6.2	1.6
0558	5.0	5.8	5.3	5.3	5.9	0.5~0.8	1.5	0.4/-0.1	1.4	7.4	1.6
6358	6.3	5.8	6.6	6.6	7.3	0.5~0.8	2.1	0.4/-0.1	2.1	9.1	1.6
6377	6.3	7.7	6.6	6.6	7.3	0.5~0.8	2.1	0.3	2.1	9.1	1.6
10A5	10.0	10.5	10.3	10.3	11.0	0.8~1.2	4.6	0.5	4.0	12.0	2.5



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
														D Φ	L	a	d	P	
1	CTB0J221MCB6358		220	±20%	6.3		-55° C ~ 105° C	0.30	13.9	67mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
2	CTB1A101MCB0558		100	±20%	10		-55° C ~ 105° C	0.24	10	39mA @ 120Hz	/	/	1000 Hrs @ 105° C	5.0mm	5.8mm			1.5mm	



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3	CTB1A101MCB6358		100	±20%	10		-55° C ~ 105° C	0.24	10	53mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
4	CTB1C100MCB0458		10	±20%	16		-55° C ~ 105° C	0.20	3	18mA @ 120Hz	/	/	1000 Hrs @ 105° C	4.0mm	5.8mm			1.0mm	
5	CTB1C470MCB6358		47	±20%	16		-55° C ~ 105° C	0.20	7.52	48mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
6	CTB1C101MCB6358		100	±20%	16		-55° C ~ 105° C	0.20	16	60mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
7	CTB1E470MCB6358		47	±20%	25		-55° C ~ 105° C	0.16	11.75	48mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
8	CTB1E101MCB6377		100	±20%	25		-55° C ~ 105° C	0.16	25	91mA @ 120Hz	/	/	2000 Hrs @ 105° C	6.3mm	7.7mm			2.1mm	
9	CTB1E471MCB10A5		470	±20%	25		-55° C ~ 105° C	0.16	117.5	280mA @ 120Hz	/	/	2000 Hrs @ 105° C	10.0mm	10.5mm			4.6mm	
10	CTB1V470MCB6358		47	±20%	35		-55° C ~ 105° C	0.14	16.45	50mA @ 120Hz	/	/	1000 Hrs @ 105° C	6.3mm	5.8mm			2.1mm	
11	CTB1H100MCB0558		10	±20%	50		-55° C ~ 105° C	0.14	5	21mA @ 120Hz	/	/	1000 Hrs @ 105° C	5.0mm	5.8mm			1.5mm	

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

<b>REMARKS:</b>	<b>APPROVED BY</b>	<b>CHECKED BY</b>	<b>PREPARED BY</b>
	李科高	张铭仁	聂婷