

ALUMINUM ELECTROLYTIC CAPACITOR



Snap In Type, CD293 Series

特性Features

- Load life of 2000 hours at 85°C
在85°C环境中，负荷寿命2000小时
- Standard 85°C
85°C标准品



主要技术性能Specification

项目 Items	特征 Performance Characteristics																																								
使用温度范围 Operating Temperature Range(°C)	-40 ~ +85°C	-25 ~ +85°C																																							
额定电压范围 Rated Voltage Range(V)	10 ~ 400 VDC	450 ~ 500 VDC																																							
标称电容量范围 Capacitance Range(uF)	68~ 82000 uF																																								
标称电容量偏差范围 Capacitance Tolerance(20°C,120Hz)	± 20%																																								
漏电流 Leakage Current (uA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller. C: Normal Capacitance(uF) V: Rated Voltage(V) 在20°C下加额定电压5分钟后，漏电流不大于0.01CV或者1.5mA,取最小值。																																								
损耗角正切值 Dissipation Factor(20°C, 120Hz) (tanδ)	<table border="1"> <thead> <tr> <th>Rated Voltage Cap(uF)</th> <th>10~16</th> <th>25</th> <th>35~50</th> <th>63</th> <th>80~100</th> </tr> </thead> <tbody> <tr> <td>≤ 2700</td> <td>-</td> <td>-</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> </tr> <tr> <td>3300 ~ 4700</td> <td>-</td> <td>0.35</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> </tr> <tr> <td>5600 ~ 6800</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> <td>0.20</td> </tr> <tr> <td>≥ 8200</td> <td>0.40</td> <td>0.35</td> <td>0.35</td> <td>0.25</td> <td>-</td> </tr> </tbody> </table>	Rated Voltage Cap(uF)	10~16	25	35~50	63	80~100	≤ 2700	-	-	0.20	0.15	0.15	3300 ~ 4700	-	0.35	0.25	0.20	0.15	5600 ~ 6800	0.40	0.35	0.30	0.20	0.20	≥ 8200	0.40	0.35	0.35	0.25	-	<table border="1"> <thead> <tr> <th>Rated Voltage φD(mm)</th> <th>160~200</th> <th>250~500</th> </tr> </thead> <tbody> <tr> <td>20~30</td> <td>0.10</td> <td>0.15</td> </tr> <tr> <td>35</td> <td>0.12</td> <td>0.15</td> </tr> </tbody> </table>	Rated Voltage φD(mm)	160~200	250~500	20~30	0.10	0.15	35	0.12	0.15
Rated Voltage Cap(uF)	10~16	25	35~50	63	80~100																																				
≤ 2700	-	-	0.20	0.15	0.15																																				
3300 ~ 4700	-	0.35	0.25	0.20	0.15																																				
5600 ~ 6800	0.40	0.35	0.30	0.20	0.20																																				
≥ 8200	0.40	0.35	0.35	0.25	-																																				
Rated Voltage φD(mm)	160~200	250~500																																							
20~30	0.10	0.15																																							
35	0.12	0.15																																							
低温稳定性 (120Hz下阻抗比) Stability at Low Temperature (Impedance Ratio at 120Hz)	<table border="1"> <thead> <tr> <th>电压Rated Voltage(V)</th> <th>10</th> <th>10~35</th> <th>50~100</th> <th>160~200</th> <th>250~400</th> <th>450~500</th> </tr> </thead> <tbody> <tr> <td>阻抗比 Impedance Ratio</td> <td>Z-25°C/Z+20°C</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> </tr> <tr> <td></td> <td>Z-40°C/Z+20°C</td> <td>18</td> <td>15</td> <td>10</td> <td>6</td> <td>8</td> </tr> </tbody> </table>	电压Rated Voltage(V)	10	10~35	50~100	160~200	250~400	450~500	阻抗比 Impedance Ratio	Z-25°C/Z+20°C	5	4	3	3	4		Z-40°C/Z+20°C	18	15	10	6	8																			
电压Rated Voltage(V)	10	10~35	50~100	160~200	250~400	450~500																																			
阻抗比 Impedance Ratio	Z-25°C/Z+20°C	5	4	3	3	4																																			
	Z-40°C/Z+20°C	18	15	10	6	8																																			
耐久性 Load Life	电压：85°C额定电压（叠加规定纹波电流）试验后常温放置16h 测定 After applying rated voltage with specified ripple current for 2000 hours at 85°C and then resumed 16 hours: 电容量变化：初始值的-15~+15%以内 Capacitance change: within ±15% of the initial value 漏电流：不大于初始规定值 Dissipation Factor: Not more than initial specified value 损耗角正切：不超过规定值的1.5倍Dissipation Factor: Not more than 150% of the specified value																																								
高温储存 Shelf Life	+85°C, 1000小时贮存后，加额定电压30分钟，恢复16小时后 After storage for 1000 hours at +85°C, rated voltage to be applied for 30 minutes and then resumed for 16 hours 电容量变化：初始值的-15~+15%以内 Capacitance change: within ±15% of the initial value 漏电流：不大于初始规定值 Dissipation Factor: Not more than initial specified value 损耗角正切：不超过规定值的1.5倍Dissipation Factor: Not more than 150% of the specified value																																								

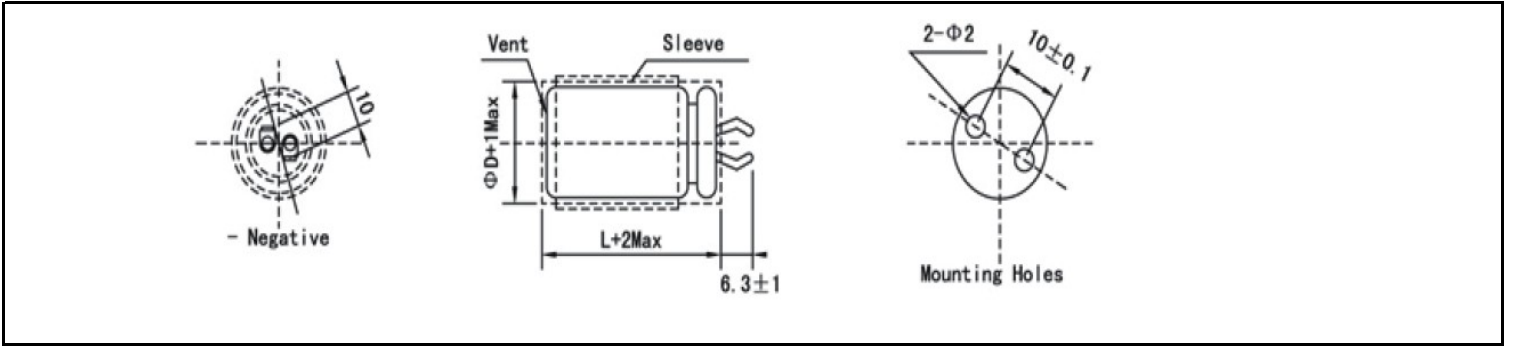
纹波电流修正系数Multiplier for ripple current

频率系数Frequency coefficient					
电压Rated Voltage(V)	50Hz	120Hz	1KHz	10KHz	100KHz
≤ 50	0.95	1.00	1.10	1.15	1.15
63~100	0.95	1.00	1.16	1.30	1.33
≥ 160	0.95	1.00	1.20	1.50	1.55

环境温度 Temperature °C	≤+40	+55	+70	+85	+105
修正系数 Coefficient	2.7	2.5	2.1	1.7	1

外形图 Dimensions

ALUMINUM ELECTROLYTIC CAPACITOR



额定值标准 Rating for CD293 Series

额定值标准 Rating for CD293 Series- Table 1-1

CD293	U _R	10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)		80V(1K)				
Cap(uF)	U _s	13V		20V		32V		44V		63V		79V		100V				
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)			
1000	102													22x25	1.3			
1200	122													22x30	1.5			
1500	152											22x25	1.6	25x25	1.7			
1800	182											22x30	1.8	22x35	1.9			
														25x30	1.9			
2200	222										22x25	1.7	22x30	2.0	22x40	2.1		
														25x25	2.0	25x35	2.2	
															30x25	2.2		
2700	272										22x30	1.9	22x35	2.2	22x50	2.5		
														25x25	1.9	25x30	2.2	
																	30x30	2.5
																	35x25	2.5
3300	332							22x25	1.8	22x35	2.0	22x40	2.3	25x45	2.8			
												25x35	2.3	30x35	2.8			
												35x25	2.3					
3900	392							22x30	2.1	22x35	2.1	22x45	2.5	25x50	3.1			
												25x30	2.1	25x40	2.6	30x40	3.2	
												30x25	2.4	30x30	2.6	35x30	3.2	
														35x25	2.7			
4700	472							25x25	2.2	22x40	2.4			30x45	3.6			
												25x35	2.4		35x35	3.6		
5600	562					22x25	2.0	22x35	2.3	22x50	2.5	25x45	3.1	30x50	3.5			
								25x30	2.3	25x40	2.5	30x35	3.2	35x40	3.5			
											30x30	2.5	35x30	3.3				
												35x25	2.6					
6800	682					22x30	2.3	22x40	2.9	25x45	2.8	30x40	3.6	35x50	4.1			
						25x25	2.3	25x35	2.6	30x35	2.8	35x35	3.7					
								30x25	2.7									
8200	822			22x25	2.2	22x35	2.6	22x50	2.8	25x50	3.2	30x50	3.7					
								25x40	2.8	30x40	3.0	35x40	3.8					
								30x30	2.8	35x30	3.0							
								35x25	2.9									
10000	103	22x25	2.5	22x30	2.6	22x40	2.9	25x45	3.1	30x45	3.4	35x45	4.3					
				25x25	2.6	25x30	2.8	30x35	3.2	35x35	3.4							
						30x25	3											
12000	123	22x25	2.9	22x35	2.9	22x45	3.3	25x50	3.5	30x50	3.8	35x50	4.8					
						25x35	3.2	30x40	3.5	35x40	3.8							
						30x30	3.4	35x30	3.6									
15000	153	22x30	3.2	22x40	3.3	25x40	3.7	30x45	4.1	35x50	4.5							
		25x25	3.1	25x30	3.3	35x25	3.9	35x35	4.1									
				30x25	3.4													

额定值标准 Rating for CD293 Series- Table 1-2

ALUMINUM ELECTROLYTIC CAPACITOR

CD293	U _R	10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)		80V(1K)	
Cap(μF)	U _s	13V		20V		32V		44V		63V		79V		100V	
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)
18000	183	22x35	3.6	22x45	3.8	25x50	4.3	30x50	4.6						
		25x30	3.6	25x35	3.7	30x35	4.2	35x40	4.7						
						35x30	4.4								
22000	223	22x40	4.0	22x50	4.2	30x40	4.8	35x45	5.3						
		25x35	4.1	25x40	4.2	35x35	5								
		30x25	4.1	30x30	4.2										
				35x25	4.4										
27000	273			25x45	5.0			35x50	7.0						
				30x35	5.0										
33000	333	25x40	4.6	30x40	5.6	35x40	6.5								
		30x30	4.8	35x30	5.6										
		35x25	4.8	35x30	5.6										
39000	393	25x45	5.2	30x45	6.2	35x45	7.5								
		30x35	5.3	35x35	6.3										
47000	473	25x30	5.8	30x50	7.0										
		30x40	6.0	35x40	7.2										
		35x30	6.0												
56000	563	30x45	6.7	35x45	8.0										
		35x35	6.8												
68000	683	30x50	7.5												
		35x40	7.7												
82000	823	35x45	8.7												

额定值标准 Rating for CD293 Series- Table 2-1

CD293	U _R	100V(2A)		160V(2C)		200V(2D)		250V(2E)		350V(2V)		400V(2G)		450V(2W)		
Cap(μF)	U _s	125V		200V		250V		300V		400V		450V		500V		
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	
68	680											22X25	0.55	22X30	0.57	
82	820									22X25	0.64	22X25	0.65	25X35	0.68	
100	101							22X25	0.68	22X25	0.80	22X30	0.70	22X35	0.72	
												25X25	0.70	25X30	0.73	
120	121									22X30	0.82	22X35	0.79	22X40	0.80	
											25X25	0.81			25X35	0.83
150	151									22X35	0.94	22X40	0.90	25X40	0.95	
											25X30	0.94	25X30	0.89	30X30	0.95
													30x25	0.95	35X25	0.98
180	181							22X25	0.94	22X40	1.1	22X45	1.0	25X45	1.1	
										30X25	1.1	25X35	1.0	30X35	1.1	
												30X30	1.1	35X25	1.2	
													35x25	1.2		
220	221			22X25	1.1	22X25	1.1	22X30	1.1	22X45	1.2	22X50	1.1	25X50	1.2	
								25X25	1.1	25X35	1.2	25X40	1.2	30x40	1.3	
										30X30	1.2	30X35	1.2	35x30	1.3	
											35x25	1.3				
270	271			22X25	1.2	22X30	1.2	22X35	1.2	25X45	1.4	25X45	1.3	30x45	1.4	
										30X35	1.4	25X50	1.4	35x35	1.5	
												30X40	1.5			
330	331			22X25	1.3	22X30	1.4					35X30	1.6	30X50	1.7	
						25X25	1.4	22X40	1.4	25X50	1.6	30X45	1.7			
								25X30	1.4	35x30	1.6					
390	391			22X30	1.5	22X35	1.6	30X25	1.5			35x35	1.8	35x45	1.9	
				25X25	1.5	25X30	1.6	22X45	1.6	30x40	1.7	35x50	1.8			
470	471			25X30	1.6	22X40	1.8	25X35	1.6	35x35	1.8	35x45	2.1	35x50	2.2	
						30X25	1.9	22X50	1.8	30x45	2.0					
								25X40	1.8	35x40	2.0					
								30X30	1.8							

ALUMINUM ELECTROLYTIC CAPACITOR

额定值标准 Rating for CD293 Series- Table 2-2

CD293	U _R	100V(2A)		160V(2C)		200V(2D)		250V(2E)		350V(2V)		400V(2G)		450V(2W)	
Cap(uF)	U _s	125V		200V		250V		300V		400V		450V		500V	
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)
560	561			22X35	1.9	22X45	2.0	35X25	2.4	35x45	2.3	35X50	2.3		
				25X30	1.9	25X35	2.0	25X45	2.0						
				30X25	2.0	30X30	2.1	30X35	2.0						
						35X25	2.0								
680	681	22X25	1.1	22X40	2.1	25X40	2.3								
						30X35	2.4	30X40	2.3						
820	821	22X30	1.2	22X50	2.5	25X50	2.6	35X30	2.6						
				25X40	2.4	30X40	2.7	30X45	2.6						
				30X30	2.5	35X30	2.5	35X35	2.6						
				35X25	2.4										
1000	102	25X25	1.4	25X45	2.7	30X45	3.1	35X40	3.0						
				30X35	2.8	35X35	2.8								
				35X30	2.7										
1200	122	22X35	1.6	25x50	3.2	30X50	3.4	35X45	3.4						
		25X30	1.6	30X40	3.2	35X40	3.2								
				35X35	3.0										
1500	152	22X40	1.8	30X45	3.7	35X50	3.8								
		25X35	1.7	35X40	3.5										
		30X25	1.8												
1800	182	22X50	2.1	35X45	3.9										
		25X40	2.0												
		30X30	2.1												
		35X25	2.2												
2200	222	25X45	2.2	35X50	4.5										
		30X35	2.3												
		35X30	2.5												
2700	272	25X50	2.6												
		30X40	2.7												
3300	332	30X45	3.0												
		35X35	3.1												
3900	392	30X50	3.4												
		35X40	3.4												
4700	472	35X40	4.0												

额定值标准 Rating for CD293 Series - Table 3

CD293	U _R	500V(2H)													
Cap(uF)	U _s	550V													
	Code	DxL	(A)												
100	101	30x25	0.9												
120	121	30x30	1.0												
		35x25	1.0												
150	151	30x35	1.2												
180	181	30x40	1.4												
		35x30	1.3												
220	221	30x45	1.6												
		35x35	1.5												
270	271	30x50	1.8												
		35x40	1.7												
330	331	35x45	2.0												
390	391	35x50	2.3												

DxL-尺寸SIZE(φDxLmm) A-额定纹波电流 Rated Ripple Current U_R-额定工作电压 Rated Voltage U_s-浪涌电压 Surge Voltage

Note: All design and specifications are for reference only and is subject to change without prior notice. If any doubt about safety for your application, please contact us immediately for technical assistance before purchase.