

## 牛角型Snap In Type, CD296 Series

### 特性Features

- Load life of 3000 hours at 105°C  
在105°C环境中，负荷寿命3000小时
- High ripple current  
能承受较高的纹波电流
- Professional Power Supplies  
适用于专业电源

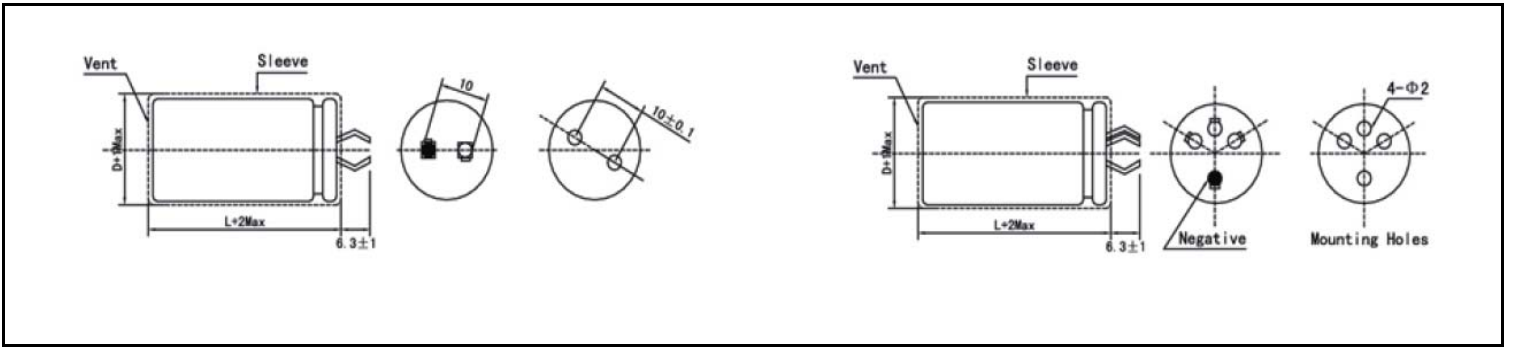


### 主要技术性能Specification

项目 Items	特征 Performance Characteristics																						
使用温度范围 Operating Temperature Range(°C)	-40 ~ +105°C	-25 ~ +105°C																					
额定电压范围 Rated Voltage Range(V)	16 ~ 100 VDC	160 ~ 500 VDC																					
标称容量范围 Capacitance Range(uF)	56~ 47000 uF																						
标称容量偏差范围 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</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63~100</th> <th>160~400</th> <th>450~500</th> </tr> </thead> <tbody> <tr> <td>(tanδ)(max)</td> <td>0.50</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table>							Rated Voltage	16	25	35	50	63~100	160~400	450~500	(tanδ)(max)	0.50	0.40	0.35	0.30	0.20	0.15	0.20
Rated Voltage	16	25	35	50	63~100	160~400	450~500																
(tanδ)(max)	0.50	0.40	0.35	0.30	0.20	0.15	0.20																
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>16~100</th> <th>160~200</th> <th>250~500</th> </tr> </thead> <tbody> <tr> <td>阻抗比 Impedance Ratio</td> <td>Z-25°C/Z+20°C</td> <td colspan="2">4</td> </tr> <tr> <td></td> <td>Z-40°C/Z+20°C</td> <td>15</td> <td>-</td> </tr> </tbody> </table>							电压Rated Voltage(V)	16~100	160~200	250~500	阻抗比 Impedance Ratio	Z-25°C/Z+20°C	4			Z-40°C/Z+20°C	15	-				
电压Rated Voltage(V)	16~100	160~200	250~500																				
阻抗比 Impedance Ratio	Z-25°C/Z+20°C	4																					
	Z-40°C/Z+20°C	15	-																				
耐久性 Load Life	电压：105°C额定电压（叠加规定纹波电流）3000小时试验后常温放置16h 测定 After applying rated voltage with specified ripple current for 3000 hours at 105°C and then resumed 16 hours: 电容量变化：初始值的-20~+20%以内      Capacitance change: within ±20% 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2.0倍      Dissipation Factor: Not more than 200% of the specified value																						
高温储存 Shelf Life	+105°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 +105°C, rated voltage to be applied for 30 minutes and then resumed for 16 hours 电容量变化：初始值的-20~+20%以内      Capacitance change: within ±20% 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2.0倍      Dissipation Factor: Not more than 200% of the specified value																						

### 纹波电流修正系数Multiplier for ripple current

频率系数Frequency coefficient		环境温度 Temperature °C					
电压Rated Voltage(V)	频率Freq(Hz)	≤+40	+55	+70	+85	+105	
≤ 100	50Hz	0.95	1.00	1.07	1.13	1.20	
160~250	120Hz	0.87	1.00	1.17	1.45	1.50	
≥ 350	1KHz	0.80	1.00	1.16	1.41	1.43	
	10KHz						
	≥ 50KHz						
		修正系数 Coefficient	2.7	2.5	2.1	1.7	1.0



额定值标准 Rating for CD296 Series

额定值标准 Rating for CD296 Series- Table 1-1

CD296	U <sub>R</sub>	16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)		80V(1K)		100V(2A)	
Cap(uF)	U <sub>s</sub>	20V		32V		44V		63V		79V		100V		125V	
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)
560	561													22X25	1.07
680	681													22X30	1.20
820	821											22X25	1.11	22X30	1.35
														25X25	1.35
1000	102											22X25	1.25	22X35	1.54
														25X30	1.56
1200	122									25X25	1.25	22X30	1.39	22X40	1.74
												25X25	1.39	25X35	1.76
														30X25	1.71
1500	152									22X25	1.39	22X35	1.61	22X45	1.99
												25X30	1.62	25X40	2.03
														30X30	2.0
													35X25	2.07	
1800	182							22X25	1.31	22X30	1.52	22X40	1.83	25X45	2.28
										25X25	1.52	30X25	1.81	30X35	2.27
2200	222							22X30	1.45	22X35	1.73	22X45	2.09	25X50	2.57
										25X30	1.75	25X35	2.01	30X40	2.59
												30X30	2.1	35X30	2.52
													35X25	2.17	
2700	272							22X30	1.7	22X40	1.97	25X45	2.43	30X45	2.94
								25X25	1.7	25X35	1.99	30X35	2.43	35X35	2.9
										30X25	1.93				
3300	332					22X25	1.43	22X35	1.98	22X50	2.32	25X50	2.76	30X50	3.32
								25X30	2.0	25X40	2.27	30X40	2.78	35X40	3.31
										30X30	2.24	35X30	2.71		
										35X25	2.41				
3900	392					22X30	1.65	22X40	2.25	25X45	2.54	30X45	3.12	35X45	3.69
								25X35	2.28	30X35	2.55	35X35	3.07		
								30X25	2.22						
4700	472			22X25	1.55	25X25	1.78	22X45	2.56	25X50	2.88	30X50	3.56	35X50	4.14
								30X30	2.58	30X40	2.9	35X40	3.5		
								35X25	2.67	35X30	2.83				
5600	562			25X25	1.70	22X35	2.02	22X50	2.89	30X45	3.28	35X45	3.87		
						25X30	2.04	25X40	2.81	35X35	3.24				
						30X25	2.12	30X35	2.95						
6800	682	22X25	1.6	22X30	1.91	22X40	2.28	25X50	3.37	30X50	3.73	35X50	4.19		
				25X25	1.91	25X35	2.31	30X40	3.39	35X40	3.71				
								35X30	3.31						
8200	822	25X25	1.80	22X35	2.14	22X50	2.67	30X45	3.71	35X45	4.16				
				25X30	2.16	25X40	2.6	35X35	3.66						
				30X25	2.25	30X30	2.56								
						35X25	2.78								
10000	103	22X30	1.99	22X40	2.4	25X45	2.9	30X50	4.09	35X50	4.69				
		25X25	1.99	25X35	2.44	30X35	2.92	35X40	4.07						

CD296	U <sub>R</sub>	16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)		80V(1K)		100V(2A)	
Cap(uF)	U <sub>s</sub>	20V		32V		44V		63V		79V		100V		125V	
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)
12000	123	22X35	2.28	22X45	2.69	25X50	3.26	35X45	4.5						
		25X30	2.30	25X40	2.74	30X40	3.28								
		30X25	2.38	30X30	2.7	35X30	3.2								
				35X25	2.8										
15000	153	22X40	2.64	25X45	3.15	30X45	3.74								
		25X35	2.68	30X35	3.13	35X35	3.69								
				35X30	3.22										
18000	183	22X45	2.98	25X50	3.54	35X40	4.16								
		25X40	3.04	30X40	3.54										
		30X30	3.0												
		35X25	3.1												
22000	223	25X45	3.4	30X45	4.24	35X50	4.92								
		30X35	3.39	35X35	3.96										
27000	273	25X50	3.81	35X45	4.75										
		30X40	3.83												
		35X30	3.74												
33000	333	30X45	4.3	35X50	5.39										
		35X35	4.24												
39000	393	30X50	4.74												
		35X40	4.72												
47000	473	35X45	5.27												

额定值标准 Rating for CD296 Series- Table 2-1

CD291	U <sub>R</sub>	160V(2C)		200V(2D)		250V(2E)		350V(2V)		400V(2G)		450V(2W)		500V(2H)	
Cap(uF)	U <sub>s</sub>	200V		250V		300V		400V		450V		500V		550V	
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)
47														22X30	0.41
56												22X25	0.47	22X30	0.47
68								22X25	0.56	22X25	0.47	22X30	0.56	22X35	0.54
												25X25	0.56	25X30	0.54
82								22X25	0.65	22X30	0.56	22X35	0.64	22X40	0.62
												25X25	0.56	25X35	0.62
100								22X30	0.7	22X30	0.62	22X40	0.70	22X45	0.67
								25X25	0.7			25X30	0.70	25X40	0.67
												30X25	0.70	30X30	0.67
120								22X35	0.73	22X35	0.66	22X45	0.73	22X50	0.77
												25X30	0.68	25X35	0.73
												30X25	0.70	30X35	0.77
														35X30	0.80
150								22X40	0.79	22X40	0.73	22X50	0.80	25X45	0.82
								25X30	0.82	25X35	0.73	25X40	0.82	30X40	0.85
								30X25	0.82			30X30	0.83	35X35	0.85
												35X25	0.86		
180	181					22X25	0.94	22X45	0.81	22X50	0.78	25X45	0.87	25X50	0.98
								25X35	0.89	25X40	0.82	30X35	0.86	30X45	1.01
								30X30	0.90	30X30	0.82				
												35X25	0.86		
220	221			22X25	1.08	22X30	1.1	22X50	0.93	25X45	0.87	25X50	0.94	30X50	1.12
						25X25	1.15	25X40	0.97	30X35	0.96	30X40	0.95	35X40	1.12
								35X25	0.98			35X30	0.91		
270	271			22X25	1.1	22X35	1.13	25X50	1.01	25X50	0.94	30X50	1.11	30X50	1.25
								30X35	1.05	30X40	0.95	35X35	1.13	35X40	1.25
								35X30	1.01	35X30	0.91				
330	331	22X25	1.16	22X30	1.3	22X40	1.2	30X45	1.16	30X45	1.11	30X50	1.15	35X45	1.36
				25X25	1.35	25X30	1.3	35X35	1.16	35X35	1.13	35X40	1.26		
						30X25	1.3								

## ALUMINUM ELECTROLYTIC CAPACITOR

CD291	U <sub>R</sub>	160V(2C)		200V(2D)		250V(2E)		350V(2V)		400V(2G)		450V(2W)		500V(2H)		
Cap(μF)	U <sub>s</sub>	200V		250V		300V		400V		450V		500V		550V		
	Code	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	DxL	(A)	
390	391	22X30	1.43	22X35	1.41	22X45	1.41	30X50	1.26	30X50	1.15	35X45	1.31	35X50	1.54	
						25X35	1.42	35X40	1.26	35X40	1.26					
470	471	22X35	1.52	22X40	1.5	22X50	1.48	35X45	1.35	35X45	1.31	35X50	1.5	35X60	1.69	
		25X25	1.55	25X30	1.47	25X40	1.47									
				30X25	1.56	30X30	1.51									
						35X25	1.50									
560	561	22X40	1.62	22X45	1.58	25X45	1.6	35X50	1.51	35X50	1.5	35X55	1.7			
		25X30	1.73	25X35	1.6	30X35	1.57									
						35X30	1.56									
680	681	22X45	1.7	22X50	1.78	25X50	1.66			35X55	1.9	35X60	2.0			
		25X35	1.81	25X40	1.8	30X40	1.68					40X50	2.0			
		30X25	1.82	30X30	1.82											
				35X25	1.86											
820	821	22X50	1.91	25X50	1.97	30X45	1.83			35X60	2.2	35X65	2.2			
		25X40	1.98	30X35	1.99	35X35	1.82			40X50	2.2	40X60	2.3			
		30X30	1.98	35X30	2.07											
		35X25	1.93													
1000	102	25X45	2.04	30X45	2.17	30X50	1.87									
		30X35	2.14	35X35	2.22	35X40	1.99									
1200	122	25X50	2.12	30X50	2.32	35X45	2.1									
		30X40	2.22	35X40	2.42											
		35X30	2.4													
1500	152	30X45	2.45	35X45	2.59	34X50	3.8									
		35X35	2.53													
1800	182	35X45	2.98	35X50	2.7											
2200	222	35X50	3.1													

DxL-尺寸SIZE(φDxLmm) A-额定纹波电流 Rated Ripple Current U<sub>R</sub>-额定工作电压 Rated Voltage U<sub>s</sub>-浪涌电压 Surge Voltage

Customer Products are available on request

可根据客户要求定制产品

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.