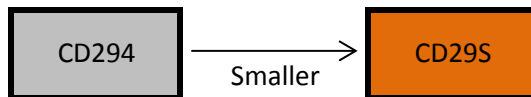


## 牛角型Snap In Type, CD29S Series

### 特性Features

- Load life of 2000 hours at 105°C  
在105°C环境中，负荷寿命2000小时
- Standard 105°C, Smaller  
105°C标准品
- General Industry  
工业品



### 主要技术性能Specification

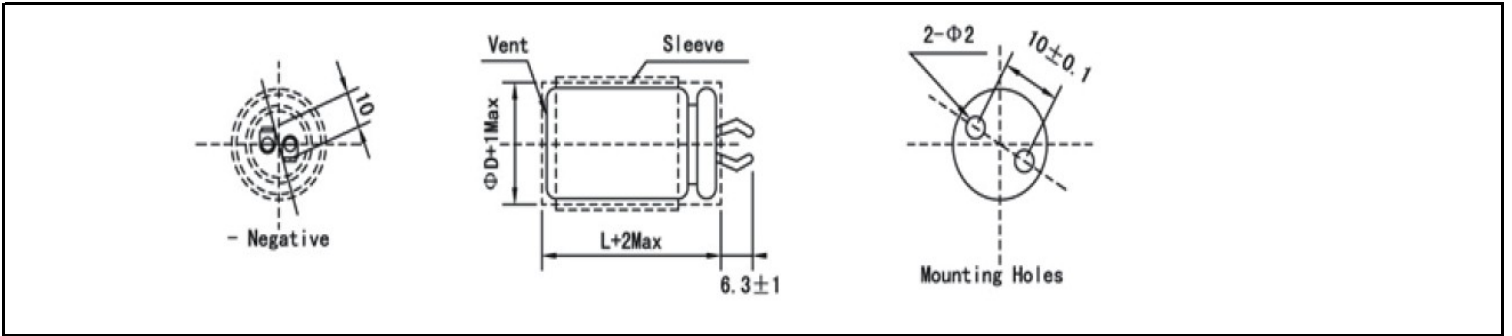
| 项目 Items   | 特征 Performance Characteristics   |              |                    |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
|--|--|--------------|--------------------|--------|---------|---------|------------------------|---------------|--------|---------|---------------|------------|------|------|------|------|------|------|------|------|
| 使用温度范围<br>Operating Temperature Range(°C)  | -40 ~ +105°C   | -25 ~ +105°C |                    |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 额定电压范围<br>Rated Voltage Range(V)   | 10 ~ 400 VDC   | 160~ 450 VDC |                    |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 标称容量范围<br>Capacitance Range(uF)  | 33~ 10000 uF   |              |                    |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 标称容量偏差范围<br>Capacitance Tolerance(20°C,120Hz)                                      | ± 20%  |              |                    |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 漏电流<br>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)<br>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<br>Dissipation Factor(20°C, 120Hz)<br>(tanδ)                                | <table border="1"> <tr> <td>Rated Voltage</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~100</td> <td>160~250</td> <td>350~450</td> </tr> <tr> <td>tanδ (max)</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.25</td> <td>0.15</td> <td>0.25</td> </tr> </table>   |              | Rated Voltage      | 10     | 16      | 25      | 35                     | 50            | 63~100 | 160~250 | 350~450       | tanδ (max) | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.25 | 0.15 | 0.25 |
| Rated Voltage  | 10   | 16           | 25                 | 35     | 50      | 63~100  | 160~250                | 350~450       |        |         |               |            |      |      |      |      |      |      |      |      |
| tanδ (max)   | 0.55   | 0.50         | 0.45               | 0.40   | 0.35    | 0.25    | 0.15                   | 0.25          |        |         |               |            |      |      |      |      |      |      |      |      |
| 低温稳定性<br>(120Hz下阻抗比)<br>Stability at Low Temperature<br>(Impedance Ratio at 120Hz) | <table border="1"> <tr> <td>电压Rated Voltage(V)</td> <td>10~100</td> <td>160~250</td> <td>350~450</td> </tr> <tr> <td rowspan="2">阻抗比<br/>Impedance Ratio</td> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>8</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>12</td> <td>-</td> </tr> </table>   |              | 电压Rated Voltage(V) | 10~100 | 160~250 | 350~450 | 阻抗比<br>Impedance Ratio | Z-25°C/Z+20°C | 3      | 8       | Z-40°C/Z+20°C | 12         | -    |      |      |      |      |      |      |      |
| 电压Rated Voltage(V)   | 10~100   | 160~250      | 350~450            |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 阻抗比<br>Impedance Ratio   | Z-25°C/Z+20°C  | 3            | 8                  |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
|  | Z-40°C/Z+20°C  | 12           | -                  |        |         |         |                        |               |        |         |               |            |      |      |      |      |      |      |      |      |
| 耐久性<br>Load Life   | +105°C额定电压（叠加规定纹波电流）2000小时试验后常温放置16h 测定<br>After applying rated voltage with specified ripple current for 2000 hours at 85°C and then resumed 16 hours:<br>电容量变化：初始值的-20~+20%以内 Capacitance change: within ±20% of the initial value<br>漏电流：不大于初始规定值 Dissipation Factor: Not more than initial specified value<br>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<br>Shelf Life   | +105°C, 1000小时贮存后，加额定电压30分钟，恢复16小时后<br>After storage for 1000 hours at +85°C, rated voltage to be applied for 30 minutes and then resumed for 16 hours<br>电容量变化：初始值的-20~+20%以内 Capacitance change: within ±20% of the initial value<br>漏电流：不大于初始规定值 Dissipation Factor: Not more than initial specified value<br>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<br>Temperature °C |      |      |      |      |
|---------------------------|------------|------------------------|------|------|------|------|
| 电压Rated Voltage(V)        | 频率Freq(Hz) | ≤+40                   | +55  | +70  | +85  | +105 |
|                           | 50Hz       | 2.7                    | 2.5  | 2.1  | 1.7  | 1.0  |
|                           | 120Hz      |                        |      |      |      |      |
| 1KHz                      | 1.15       | 1.15                   | 1.15 | 1.15 | 1.15 |      |
| 10KHz                     | 1.15       | 1.15                   | 1.15 | 1.15 | 1.15 |      |
| 50KHz                     | 1.15       | 1.15                   | 1.15 | 1.15 | 1.15 |      |
| ≤ 100                     | 0.90       | 0.90                   | 0.90 | 0.90 | 0.90 |      |
| 160~250                   | 0.90       | 0.90                   | 0.90 | 0.90 | 0.90 |      |
| 350~450                   | 0.85       | 0.85                   | 0.85 | 0.85 | 0.85 |      |
| 修正系数<br>Coefficient       |            | 2.7                    | 2.5  | 2.1  | 1.7  | 1.0  |

# 外形图 Dimensions

# ALUMINUM ELECTROLYTIC CAPACITOR



## 额定值标准 Rating for CD29S Series

额定值标准 Rating for CD29S Series- Table 1

| CD29S   | U <sub>R</sub> | 10V(1A) |      | 16V(1C) |      | 25V(1E) |      | 35V(1V) |      | 50V(1H) |      | 63V(1J) |      | 80V(1K) |      |
|---------|----------------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|---------|------|
| Cap(μF) | U <sub>s</sub> | 13V     |      | 20V     |      | 32V     |      | 44V     |      | 63V     |      | 79V     |      | 100V    |      |
|         | Code           | DxL     | (A)  | DxL     | (A)  | DxL     | (A)  | DxL     | (A)  | DxL     | (A)  | DxL     | (A)  | DxL     | (A)  |
| 470     | 471            |         |      |         |      |         |      |         |      |         |      |         |      | 22X20   | 0.65 |
| 560     | 561            |         |      |         |      |         |      |         |      |         |      |         |      | 22X20   | 0.70 |
| 680     | 681            |         |      |         |      |         |      |         |      |         |      | 22X20   |      | 25X20   | 0.84 |
| 820     | 821            |         |      |         |      |         |      |         |      |         |      | 25X20   | 0.99 | 30X20   | 1.04 |
| 1000    | 102            |         |      |         |      |         |      |         |      | 22X20   | 0.87 | 25X20   | 1.10 | 30X20   | 1.19 |
| 1200    | 122            |         |      |         |      |         |      |         |      | 25X20   | 1.02 | 30X20   | 1.20 | 30X20   | 1.44 |
| 1500    | 152            |         |      |         |      |         |      | 22X20   | 0.80 | 25X20   | 1.15 | 30X20   | 1.47 |         |      |
| 1800    | 182            |         |      |         |      |         |      | 25X20   | 0.94 | 30X20   | 1.34 | 30X20   | 1.52 |         |      |
| 2200    | 222            |         |      |         |      | 22X20   | 0.98 | 25X20   | 1.04 | 30X20   | 1.60 |         |      |         |      |
| 2700    | 272            |         |      |         |      | 25X20   | 1.08 | 30X20   | 1.29 |         |      |         |      |         |      |
| 3300    | 332            |         |      | 22X20   | 1.06 | 25X20   | 1.29 | 30X20   | 1.45 |         |      |         |      |         |      |
| 3900    | 392            |         |      | 25X20   | 1.25 | 30X20   | 1.58 |         |      |         |      |         |      |         |      |
| 4700    | 472            | 22X20   | 0.98 | 25X20   | 1.38 | 30X20   | 1.61 |         |      |         |      |         |      |         |      |
| 5600    | 562            | 25X20   | 1.16 | 30X20   | 1.68 |         |      |         |      |         |      |         |      |         |      |
| 6800    | 682            | 25X20   | 1.31 | 30X20   | 1.80 |         |      |         |      |         |      |         |      |         |      |
| 8200    | 822            | 30X20   | 1.59 |         |      |         |      |         |      |         |      |         |      |         |      |
| 10000   | 103            | 30X20   | 1.77 |         |      |         |      |         |      |         |      |         |      |         |      |

额定值标准 Rating for CD29S Series- Table 2

| CD29S   | U <sub>R</sub> | 100V(2A) |      | 160V(2C) |      | 200V(2D) |      | 250V(2E) |      | 350V(2V) |      | 400V(2G) |      | 450V(2W) |      |
|---------|----------------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|
| Cap(μF) | U <sub>s</sub> | 125V     |      | 200V     |      | 250V     |      | 300V     |      | 400V     |      | 450V     |      | 500V     |      |
|         | Code           | DxL      | (A)  | DxL      | (A)  | DxL      | (A)  | DxL      | (A)  | DxL      | (A)  | DxL      | (A)  | DxL      | (A)  |
| 33      | 330            |          |      |          |      |          |      |          |      |          |      | 22X20    | 0.27 | 22X20    | 0.25 |
| 39      | 390            |          |      |          |      |          |      |          |      |          |      | 22X20    | 0.27 | 25X20    | 0.28 |
| 47      | 470            |          |      |          |      |          |      |          |      | 22X20    | 0.28 | 25X20    | 0.31 | 25X20    | 0.31 |
| 56      | 560            |          |      |          |      |          |      |          |      | 25X20    | 0.34 | 25X20    | 0.34 | 30X20    | 0.36 |
| 68      | 680            |          |      |          |      |          |      | 22X20    | 0.39 | 25X20    | 0.39 | 30X20    | 0.45 | 30X20    | 0.40 |
| 82      | 820            |          |      |          |      |          |      | 22X20    | 0.45 | 30X20    | 0.45 | 30X20    | 0.45 |          |      |
| 100     | 101            |          |      |          |      | 22X20    | 0.51 | 25X20    | 0.59 | 30X20    | 0.49 |          |      |          |      |
| 120     | 121            |          |      | 22X20    | 0.53 | 22X20    | 0.56 | 25X20    | 0.62 |          |      |          |      |          |      |
| 150     | 151            |          |      | 22X20    | 0.59 | 25X20    | 0.65 | 30X20    | 0.76 |          |      |          |      |          |      |
| 180     | 181            |          |      | 25X20    | 0.70 | 30X20    | 0.78 | 30X20    | 0.79 |          |      |          |      |          |      |
| 220     | 221            |          |      | 25X20    | 0.75 | 30X20    | 0.85 |          |      |          |      |          |      |          |      |
| 270     | 271            |          |      | 30X20    | 0.95 |          |      |          |      |          |      |          |      |          |      |
| 330     | 331            | 22X20    | 0.60 | 30X20    | 1.05 |          |      |          |      |          |      |          |      |          |      |
| 390     | 391            | 25X20    | 0.71 |          |      |          |      |          |      |          |      |          |      |          |      |
| 470     | 471            | 25X20    | 0.78 |          |      |          |      |          |      |          |      |          |      |          |      |
| 560     | 561            | 30X20    | 0.95 |          |      |          |      |          |      |          |      |          |      |          |      |
| 680     | 681            | 30X20    | 1.09 |          |      |          |      |          |      |          |      |          |      |          |      |
| 820     | 821            | 30X20    | 1.32 |          |      |          |      |          |      |          |      |          |      |          |      |

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

可根据客户要求定制产品 Customer Products are available on request

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.