

DP标准品, 宽温度 (CD293A型)

- 焊针式, 中高压, 标准品
Snap-in, Medium and high voltage, standard.
- 适用于显示器、彩电、空调等
used in display device, color-TV, air conditioning etc.
- ROHS 指令已对应完毕。
Adapted to the ROHS directive

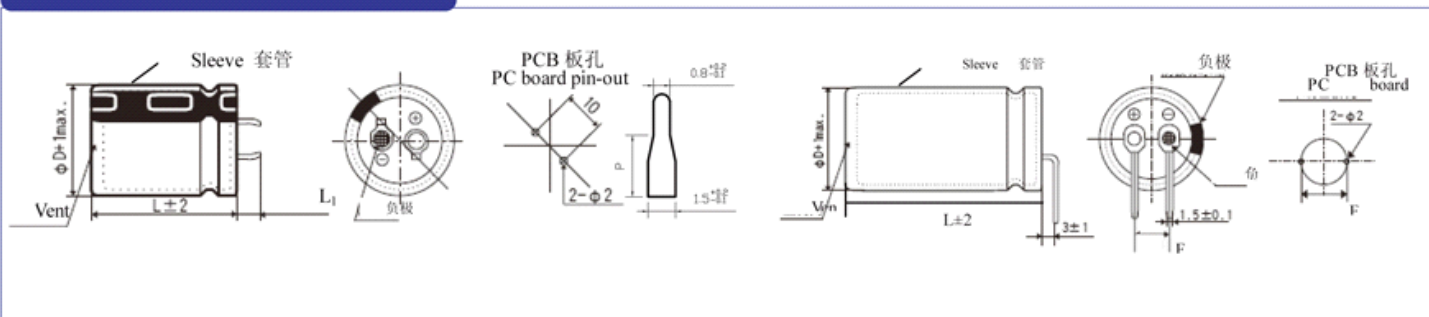


主要技术性能 Specifications

| 项目 Item | 特性 Performance Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------|--------------------|-------|--------|---------|---------|---------|---------|---------|---------------|------|------|------|------|------|------|------|---------------|------|----|---|---|---|---|---|
| 使用温度范围 Operating temperature range | -40℃ ~ +105℃ | -25℃~+105℃ | | | | | | | | | | | | | | | | | | | | | | | | |
| 额定电压范围 Rated voltage range | 10 ~ 200 V | 250V ~ 450V | | | | | | | | | | | | | | | | | | | | | | | | |
| 标称电容量范围 Nominal capacitance range | 39 ~ 22000µF | | | | | | | | | | | | | | | | | | | | | | | | | |
| 标称电容量允许偏差 Capacitance tolerance | ±20% (120Hz, +20°C) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 Leakage current | I ≤ 0.03CV(µA)或3mA 取较小值 (Whichever is smaller) 5分钟 (at 20°C, after 5 minutes) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz) | <table border="1"> <tr> <td>U_R (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~100</td> <td>160~200</td> <td>250~450</td> </tr> <tr> <td>tg δ</td> <td>0.45</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.12</td> <td>0.15</td> </tr> </table> <p>容量大于 3300µF 者, 每增加 1000µF, 其损耗角正切值增加 0.02 For capacitance value >1000µF, add 0.02 per another 1000µF</p> | | U _R (V) | 10 | 16 | 25 | 35 | 50 | 63~100 | 160~200 | 250~450 | tg δ | 0.45 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.12 | 0.15 | | | | | | |
| U _R (V) | 10 | 16 | 25 | 35 | 50 | 63~100 | 160~200 | 250~450 | | | | | | | | | | | | | | | | | | |
| tg δ | 0.45 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.12 | 0.15 | | | | | | | | | | | | | | | | | | |
| 温度特性 Temperature characteristics (Impedance ratio at 120Hz) | <table border="1"> <tr> <td>U_R (V)</td> <td>10,16</td> <td>25</td> <td>35</td> <td>50,63</td> <td>80,100</td> <td>160~200</td> <td>250~450</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>6</td> <td>-</td> </tr> </table> | | U _R (V) | 10,16 | 25 | 35 | 50,63 | 80,100 | 160~200 | 250~450 | Z-25°C/Z+20°C | 4 | 3 | 3 | 2 | 2 | 3 | 4 | Z-40°C/Z+20°C | 15 | 10 | 8 | 6 | 5 | 6 | - |
| U _R (V) | 10,16 | 25 | 35 | 50,63 | 80,100 | 160~200 | 250~450 | | | | | | | | | | | | | | | | | | | |
| Z-25°C/Z+20°C | 4 | 3 | 3 | 2 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | |
| Z-40°C/Z+20°C | 15 | 10 | 8 | 6 | 5 | 6 | - | | | | | | | | | | | | | | | | | | | |
| 耐久性 Load life | <p>+105℃施加带纹波电流的额定电压 1000 小时, 恢复 16 小时后: After applying rated voltage with specified ripple current for 1000 hours at +105℃ and then resumed 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 Initial measured value 漏 电 流 Leakage current : ≤初始规定值 Initial specified value 损耗角正切值 Dissipation factor : ≤2 倍初始规定值 2times Initial specified value</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| 高温贮存 Shelf life | <p>+105℃,1000 小时贮存后, 加额定工作电压处理 30 分钟, 恢复 16 小时后: After storage for 1000 hours at +105℃, U_R to be applied for 30 minutes and then resumed 16 hours 电容量变化率 Capacitance change : ±20%初始测量值以内 Initial measured value 漏 电 流 Leakage current : ≤初始规定值 Initial specified value 损耗角正切值 Dissipation factor : ≤2 倍初始规定值 2times Initial specified value</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

外形图及尺寸表 Case size table

单位Unit: mm



允许纹波电流的修正系数 Coefficient of allowable ripple current

| 频率 (Hz) | 50 | 100(120) | 1K | 10K | 20K |
|-----------|-------|----------|------|------|------|
| U (V) | | | | | |
| 10 ~ 50 | 0.88 | 1 | 1.10 | 1.15 | 1.15 |
| 63 ~ 100 | 0.81 | 1 | 1.16 | 1.30 | 1.33 |
| 160 ~ 450 | 0.707 | 1 | 1.20 | 1.50 | 1.55 |

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

尺寸 DIMENSIONS

| Cap.(μF) | Code | 10V | | 16V | | 25V | | 35V | | 50V | | 63V | | 100V | |
|----------|------|-------|-----|-------|-----|-------|-----|-------|------|-------|------|-------|-----|-------|------|
| | | 13V | | 20V | | 32V | | 44V | | 63V | | 79V | | 125V | |
| | | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) |
| 390 | 391 | | | | | | | | | | | | | 22×25 | 0.64 |
| 560 | 561 | | | | | | | | | | | | | 22×30 | 0.80 |
| | | | | | | | | | | | | | | 25×25 | 0.80 |
| 680 | 681 | | | | | | | | | | | | | 22×35 | 0.92 |
| | | | | | | | | | | | | | | 25×30 | 0.92 |
| 820 | 821 | | | | | | | | | 22×25 | 0.92 | 22×40 | 1.0 | | |
| | | | | | | | | | | | | 30×25 | 1.0 | | |
| 1000 | 102 | | | | | | | | | | | 25×35 | 1.1 | | |
| | | | | | | | | | | | | 30×30 | 1.2 | | |
| | | | | | | | | | | | | 35×25 | 1.3 | | |
| 1200 | 122 | | | | | | | 22×25 | 0.96 | 22×30 | 1.2 | 22×50 | 1.3 | | |
| | | | | | | | | | | 25×25 | 1.1 | 30×35 | 1.4 | | |
| | | | | | | | | | | | | 35×30 | 1.4 | | |
| 1500 | 152 | | | | | | | 22×35 | 1.3 | 25×50 | 1.5 | | | | |
| | | | | | | | | 35×30 | 1.3 | 30×40 | 1.6 | | | | |
| | | | | | | | | 30×25 | 1.4 | 35×35 | 1.8 | | | | |
| 1800 | 182 | | | | | | | 22×30 | 1.2 | 22×40 | 1.5 | | | | |
| | | | | | | | | 25×25 | 1.2 | 25×35 | 1.5 | | | | |
| | | | | | | | | | | 30×25 | 1.5 | | | | |
| 2200 | 222 | | | | | 22×25 | 1.1 | 22×35 | 1.4 | 22×50 | 1.7 | 30×50 | 2.0 | | |
| | | | | | | | | | | 30×30 | 1.7 | 35×40 | 2.0 | | |
| | | | | | | | | | | 35×25 | 1.8 | | | | |
| 2700 | 272 | | | | | 22×30 | 1.3 | 22×40 | 1.6 | 30×35 | 2.0 | 35×50 | 2.3 | | |
| 3300 | 332 | | | | | 22×25 | 1.3 | 25×25 | 1.3 | 25×35 | 1.6 | 25×50 | 2.2 | | |
| | | | | | | | | 30×30 | 1.8 | 30×40 | 2.3 | | | | |
| | | | | | | | | 35×25 | 1.8 | | | | | | |
| 4700 | 472 | | | 22×25 | 1.4 | 22×30 | 1.6 | 22×40 | 1.9 | 30×35 | 2.3 | 30×50 | 2.8 | | |
| | | | | | | 25×25 | 1.6 | 30×25 | 1.9 | 35×30 | 2.4 | 35×40 | 2.9 | | |
| 5600 | 562 | | | | | 22×35 | 1.8 | 25×35 | 2.0 | 25×50 | 2.5 | | | | |
| | | | | | | 25×30 | 1.8 | 30×30 | 2.1 | 30×40 | 2.5 | | | | |
| | | | | | | | | 35×25 | 2.2 | 35×35 | 2.7 | | | | |
| 6800 | 682 | 22×25 | 1.5 | 22×30 | 1.8 | 22×40 | 2.0 | 22×50 | 2.4 | 30×50 | 2.9 | 35×50 | 3.6 | | |
| | | | | 25×25 | 1.8 | 30×25 | 2.0 | 25×40 | 2.3 | 35×40 | 3.0 | | | | |
| 8200 | 822 | 25×25 | 1.7 | 22×35 | 2.0 | 25×35 | 2.2 | 25×50 | 2.7 | | | | | | |
| | | | | | | 30×30 | 2.3 | 30×35 | 2.9 | | | | | | |
| | | | | | | 35×25 | 2.4 | 35×30 | 2.8 | | | | | | |
| 10000 | 103 | 22×30 | 1.9 | 22×40 | 2.3 | 22×50 | 2.6 | 30×40 | 3.0 | 35×50 | 3.8 | | | | |
| | | | | 30×25 | 2.3 | 25×40 | 2.6 | 30×40 | 3.0 | | | | | | |
| | | | | 25×30 | 2.2 | | | | | | | | | | |
| 12000 | 123 | 22×35 | 2.1 | 25×35 | 2.5 | 25×50 | 2.9 | 30×50 | 3.4 | | | | | | |
| | | 25×35 | 2.1 | 30×30 | 2.6 | 30×35 | 2.9 | 35×40 | 3.5 | | | | | | |
| | | 30×25 | 2.2 | 35×25 | 2.7 | 35×30 | 3.0 | | | | | | | | |
| 15000 | 153 | 22×40 | 2.5 | | | | | | | | | | | | |
| | | 25×50 | 2.5 | 22×50 | 2.9 | 30×40 | 3.3 | | | | | | | | |
| | | 35×25 | 2.5 | 25×40 | 2.9 | 35×35 | 3.5 | | | | | | | | |
| 18000 | 183 | 22×50 | 2.8 | 25×50 | 3.3 | | | | | | | | | | |
| | | 25×40 | 2.8 | 30×35 | 3.3 | 30×50 | 3.8 | 35×50 | 4.5 | | | | | | |
| | | 30×30 | 2.8 | 35×30 | 3.4 | 35×40 | 3.9 | | | | | | | | |
| 22000 | 223 | 30×35 | 3.2 | 30×40 | 3.7 | | | | | | | | | | |
| | | 35×30 | 3.3 | 35×35 | 3.9 | | | | | | | | | | |

U_R - 额定工作电压 U_S - 浪涌电压 额定纹波电流 Rated ripple current (+105°C, 120Hz)

尺寸 DIMENSIONS

| Cap.(μF) | Code | 160V(2C) | | 200V(2D) | | 250V(2E) | | 400V(2G) | | 450V(2w) | |
|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|
| | | 200 | | 250 | | 300 | | 450 | | 500 | |
| | | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) | D×L | (A) |
| 39 | 390 | | | | | | | | | 22×25 | 0.32 |
| 56 | 560 | | | | | | | | | 22×30 | 0.39 |
| | | | | | | | | | | 25×25 | 0.40 |
| 68 | 680 | | | | | | | | | 22×35 | 0.45 |
| | | | | | | | | | | 25×30 | 0.46 |
| 82 | 820 | | | | | | | | | 22×40 | 0.51 |
| | | | | | | | | | | 30×25 | 0.53 |
| 100 | 101 | | | | | 22×25 | 0.45 | 25×35 | 0.57 | 22×35 | 0.93 |
| | | | | | | | | 30×30 | 0.61 | | |
| | | | | | | | | 35×25 | 0.65 | | |
| 120 | 121 | | | | | | | 22×50 | 0.64 | 22×40 | 1.04 |
| | | | | | | | | 25×40 | 0.63 | | |
| 150 | 151 | | | | | 22×30 | 0.58 | 25×50 | 0.75 | 22×50 | 1.19 |
| | | | | | | 25×25 | 0.58 | 30×35 | 0.77 | | |
| | | | | | | | | 35×30 | 0.83 | | |
| 180 | 181 | 22×25 | 0.65 | 22×25 | 0.65 | 22×35 | 0.65 | 30×40 | 0.87 | | |
| | | | | | | | | 35×35 | 0.93 | | |
| 220 | 221 | | | 22×30 | 0.75 | 22×40 | 0.75 | 30×50 | 1.0 | 25×50 | 1.55 |
| | | | | 25×25 | 0.75 | 25×30 | 0.73 | 35×40 | 1.1 | | |
| | | | | | | 30×25 | 0.77 | | | | |
| 270 | 271 | 22×30 | 0.83 | 22×35 | 0.86 | 25×35 | 0.83 | | | 30×45 | 1.78 |
| | | 25×25 | 0.82 | | | 30×30 | 0.88 | | | | |
| | | | | | | 35×25 | 0.93 | | | | |
| 330 | 331 | 22×35 | 0.94 | 25×30 | 0.96 | 22×50 | 0.96 | | | 35×45 | 2.01 |
| | | 22×40 | 1.24 | 30×25 | 1.0 | 25×40 | 0.95 | | | | |
| 390 | 391 | 25×30 | 1.0 | 22×40 | 1.1 | 30×35 | 1.1 | 35×50 | 1.3 | 35×50 | 2.24 |
| | | 22×40 | 1.1 | 25×35 | 1.1 | 35×30 | 1.2 | | | | |
| | | 30×25 | 1.1 | 35×25 | 1.2 | | | | | | |
| 470 | 471 | 25×35 | 1.2 | 22×50 | 1.2 | 25×50 | 1.2 | | | 35×50 | 2.53 |
| | | 35×25 | 1.3 | 25×40 | 1.2 | 30×40 | 1.2 | | | | |
| | | | | 30×30 | 1.2 | 35×35 | 1.3 | | | | |
| 560 | 561 | 22×50 | 1.3 | 30×35 | 1.4 | 30×50 | 1.4 | | | | |
| | | 25×40 | 1.3 | 35×30 | 1.5 | 35×40 | 1.5 | | | | |
| | | 30×30 | 1.3 | | | | | | | | |
| 680 | 681 | 25×50 | 1.5 | 25×50 | 1.5 | | | | | | |
| | | 35×30 | 1.6 | 30×40 | 1.6 | | | | | | |
| 820 | 821 | 25×50 | 1.7 | 35×35 | 1.8 | 35×50 | 1.9 | | | | |
| | | 30×40 | 1.7 | | | | | | | | |
| | | 35×35 | 1.8 | | | | | | | | |
| 1000 | 102 | 30×50 | 2.1 | 30×50 | 2.0 | | | | | | |
| | | 35×40 | 2.0 | 35×40 | 2.1 | | | | | | |
| 1200 | 122 | | | 35×50 | 2.4 | | | | | | |
| 1500 | 152 | 35×50 | 2.6 | | | | | | | | |

U_R - 额定工作电压 U_S - 浪涌电压 额定纹波电流 Rated ripple current (A, +105°C, 120Hz)