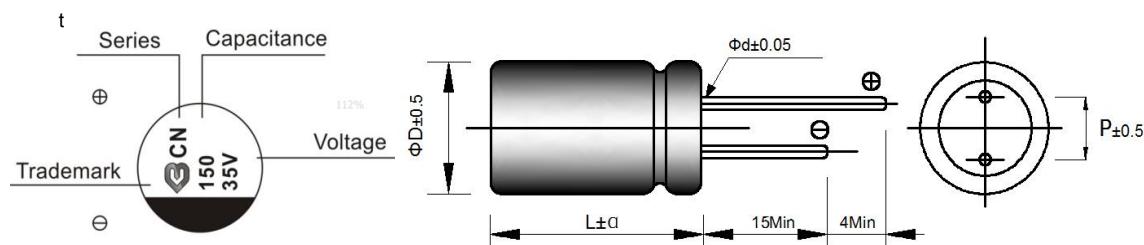


**CN Series**

- Low impedance, high ripple current, high voltage, high temperature resistant
- Load life of 2000 hours at 125°C
- RoHS Compliant

**◆ 规格表 Specifications**

| 项目 Items  | 特性参数 Characteristics  |                                      |          |
|---|---|--------------------------------------|----------|
| 使用温度范围<br>Category<br>Temperature Range                             | -55 ~ +125°C  |                                      |          |
| 额定工作电压范围<br>Rated Voltage Range                                     | 35 ~ 250 V  |                                      |          |
| 静电容量允许偏差<br>Capacitance tolerance                                   | $\pm 20\%$ (M) (at 20°C, 120Hz)   |                                      |          |
| 漏电流<br>Leakage Current  | 施加额定工作电压2分钟后读数，小于或等于规格值 (20°C)<br>$I \leq 0.15CV$ 或 $120\mu A$ (取大值) (The bigger)<br>After 2 minutes applied for rated voltage at 20°C, less than or equal to the specified value.  |                                      |          |
| 损耗角正切值tanδ<br>Dissipation Factor                                    | 小于或等于规格<br>Less than or equal to the specified<br>(at 20°C, 120Hz)  |                                      |          |
| 温度特性<br>Low Temperature<br>Characteristics<br>(Max.Impedance Ratio) | Z(-25°C)/Z(+20°C)   | $\leq 1.25$                          | (100KHz) |
|   | Z(-55°C)/Z(+20°C)   | $\leq 1.25$                          |          |
| 耐久性<br>Endurance  | 125°C 施加额定工作电压2000小时，恢复到20°C后，产品性能应满足以下要求<br>The specifications listed below shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 125°C.  |                                      |          |
|   | Appearance  | No significant damage                |          |
|   | Capacitance change  | $\leq \pm 20\%$ of the initial value |          |
|   | D.F.(tanδ)  | $\leq 150\%$ of the specified value  |          |
|   | ESR   | $\leq 150\%$ of the specified value  |          |
|   | Leakage current   | $\leq$ The specified value           |          |
| Damp Heat<br>(Steady State)<br>耐湿负荷特性                               | 在60°C 温度，湿度90%~95%RH的环境中，施加额定电压1000小时后，恢复到20°C后，产品性能应满足以下要求<br>The specifications listed below shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90% ~ 95% RH.   |                                      |          |
|   | Appearance  | No significant damage                |          |
|   | Capacitance change  | $\leq \pm 20\%$ of the initial value |          |
|   | D.F.(tanδ)  | $\leq 150\%$ of the specified value  |          |
|   | ESR   | $\leq 150\%$ of the specified value  |          |
|   | Leakage current   | $\leq$ The specified value           |          |
| 浪涌电压特性<br>(Surge Voltage)   | 浪涌电压=额定电压* 1.15(V)<br>Surge Voltage=Rated voltage * 1.15(V)<br>在125°C 环境中，按充电30秒，放电5分30秒，连续施加浪涌电压1000次( $R_c=1k\Omega$ )，待恢复后测试，应满足以下要求<br>The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages specified at 125°C for 30 seconds through a protective resistor ( $R_c=1k\Omega$ ) and discharge for 5 minutes 30 seconds |                                      |          |
|   | Appearance  | No significant damage                |          |
|   | Capacitance change  | $\leq \pm 20\%$ of the initial value |          |
|   | D.F.(tanδ)  | $\leq 150\%$ of the specified value  |          |
|   | ESR   | $\leq 150\%$ of the specified value  |          |
|   | Leakage current   | $\leq$ The specified value           |          |

**◆ 外形图 Dimensions (mm)**

| ΦD          | 5   | 6.3 | 8   | 10  |
|-------------|-----|-----|-----|-----|
| P           | 2   | 2.5 | 3.5 | 5   |
| Φd          | 0.5 | 0.5 | 0.6 | 0.6 |
| L<16mm: 1.0 |     |     |     |     |
| L≥16mm: 2.0 |     |     |     |     |

## CN Series

## ◆ 尺寸与最大纹波电流一览表 Standard Ratings

| Rated voltage (V) | Rated capacitance(uF) | Case size ΦD*L(mm) | tanδ (120Hz) | ESR(mΩ) at 20°C, 100 KHz | Rated ripple current (mA rms/105°C /100kHz) | Rated ripple current (mA rms/125°C /100kHz) |
|-------------------|-----------------------|--------------------|--------------|--------------------------|---|---|
| 35<br>(1V)        | 22                    | 5*11               | 0.12         | 80                       | 600   | 350   |
|                   | 22                    | 6.3*8              | 0.12         | 68                       | 1150  | 600   |
|                   | 47                    | 8*8                | 0.12         | 55                       | 1500  | 750   |
|                   | 150                   | 8*12               | 0.12         | 45                       | 2300  | 1480  |
|                   | 220                   | 10*12              | 0.12         | 45                       | 2900  | 2000  |
| 50<br>(1H)        | 22                    | 5*11               | 0.12         | 75                       | 560   | 310   |
|                   | 22                    | 6.3*8              | 0.12         | 75                       | 950   | 420   |
|                   | 47                    | 8*12               | 0.12         | 37                       | 2100  | 1200  |
|                   | 68                    | 10*12              | 0.12         | 32                       | 2300  | 1440  |
|                   | 120                   | 10*12              | 0.12         | 31                       | 2670  | 1760  |
| 63<br>(1J)        | 22                    | 8*8                | 0.12         | 83                       | 1500  | 580   |
|                   | 33                    | 8*12               | 0.12         | 75                       | 1800  | 720   |
|                   | 82                    | 10*12              | 0.12         | 50                       | 2500  | 1380  |
| 80<br>(1K)        | 10                    | 8*8                | 0.12         | 53                       | 1150  | 530   |
|                   | 12                    | 8*12               | 0.12         | 51                       | 1800  | 620   |
|                   | 22                    | 10*12              | 0.12         | 45                       | 2100  | 850   |
|                   | 47                    | 8*12               | 0.12         | 68                       | 1900  | 800   |
| 100<br>(2A)       | 15                    | 8*12               | 0.12         | 52                       | 1850  | 680   |
|                   | 22                    | 10*12              | 0.12         | 44                       | 2300  | 720   |
|                   | 33                    | 10*12              | 0.12         | 44                       | 2500  | 950   |
| 160<br>(2C)       | 10                    | 8*12               | 0.12         | 110                      | 1350  | 550   |
|                   | 15                    | 10*12              | 0.12         | 94                       | 1580  | 685   |
|                   | 22                    | 10*12              | 0.12         | 88                       | 1850  | 850   |
| 200<br>(2D)       | 8.2                   | 8*12               | 0.12         | 297                      | 950   | 420   |
|                   | 15                    | 10*12              | 0.12         | 275                      | 1350  | 580   |
| 220<br>(2P)       | 6.8                   | 8*12               | 0.12         | 440                      | 750   | 250   |
|                   | 10                    | 10*12              | 0.12         | 396                      | 1050  | 550   |
| 250<br>(2E)       | 3.3                   | 8*12               | 0.12         | 512                      | 450   | 175   |
|                   | 4.7                   | 8*12               | 0.12         | 512                      | 600   | 210   |
|                   | 6.8                   | 10*12              | 0.12         | 482                      | 780   | 250   |
|                   | 8.2                   | 10*12              | 0.12         | 458                      | 950   | 315   |

## ◆ 纹波电流补正系数 Rated Ripple Current Coefficient

| 频率Frequency(Hz) | 120Hz≤f<1kHz | 1kHz≤f<10kHz | 10kHz≤f<100kHz | 100kHz≤f<500kHz |
|-----------------|--------------|--------------|----------------|-----------------|
| 系数 Coefficient  | 0.05         | 0.30         | 0.70           | 1.00            |