

CN Series

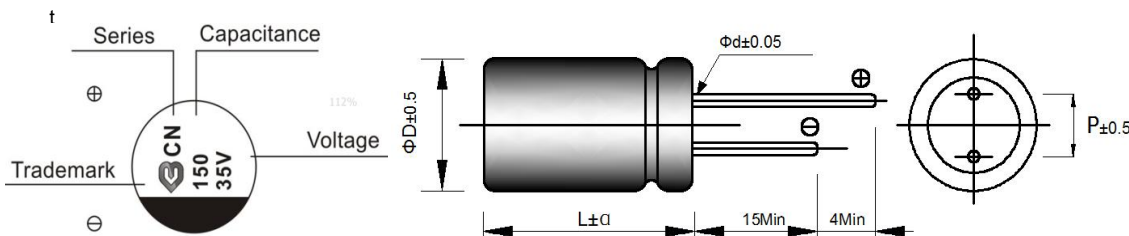
- Low impedance, high ripple current, high voltage, high temperature resistant
- Load life of 2000 hours at 125°C
- RoHS Compliant



规格表 Specifications

| 项目 Items | 特性参数 Characteristics | |
|--|---|-------------------------------|
| 使用温度范围 Category Temperature Range | -55 ~ +125°C | |
| 额定工作电压范围 Rated Voltage Range | 35 ~ 250 V | |
| 静电容量允许偏差 Capacitance tolerance | ±20%(M) (at 20°C, 120Hz) | |
| 漏电流 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) I ≤ 0.2CV 或 500μA (取大值) (The bigger) 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 Dissipation Factor | 小于或等于规格 (at 20°C, 120Hz) Less than or equal to the specified | |
| 温度特性 Low Temperature Characteristics (Max.Impedance Ratio) | Z(-25°C)/Z(+20°C) | ≤ 1.25 |
| | Z(-55°C)/Z(+20°C) | ≤ 1.25 |
| 耐久性 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 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 | ≤ ±20% of the initial value |
| | D.F.(tanδ) | ≤ 150% of the specified value |
| | ESR | ≤ 150% of the specified value |
| | Leakage current | ≤ The specified value |
| Damp Heat (Steady State) 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 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 | ≤ ±20% of the initial value |
| | D.F.(tanδ) | ≤ 150% of the specified value |
| | ESR | ≤ 150% of the specified value |
| | Leakage current | ≤ The specified value |
| 浪涌电压特性 (Surge Voltage) | 浪涌电压=额定电压* 1.15(V) Surge Voltage=Rated voltage * 1.15(V) 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(Rc=1kΩ), 待恢复后测试, 应满足以下要求 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 (Rc=1kΩ) and discharge for 5 minutes 30 seconds | |
| | Appearance | No significant damage |
| | Capacitance change | ≤ ±20% of the initial value |
| | D.F.(tanδ) | ≤ 150% of the specified value |
| | ESR | ≤ 150% of the specified value |
| | Leakage current | ≤ 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 |
| a | L < 16mm: 1.0 | | | |
| | L ≥ 16mm: 2.0 | | | |

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◆ 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 (mArms/105°C /100kHz) | Rated ripple current (mArms/125°C /100kHz) |
|-------------------|-----------------------|--------------------|--------------|--------------------------|--|--|
| 35 (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 (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 (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 (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 (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 (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 (2D) | 8.2 | 8*12 | 0.12 | 297 | 950 | 420 |
| | 15 | 10*12 | 0.12 | 275 | 1350 | 580 |
| 220 (2P) | 6.8 | 8*12 | 0.12 | 440 | 750 | 250 |
| | 10 | 10*12 | 0.12 | 396 | 1050 | 550 |
| 250 (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 |

◆ 纹波电流修正系数 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 |