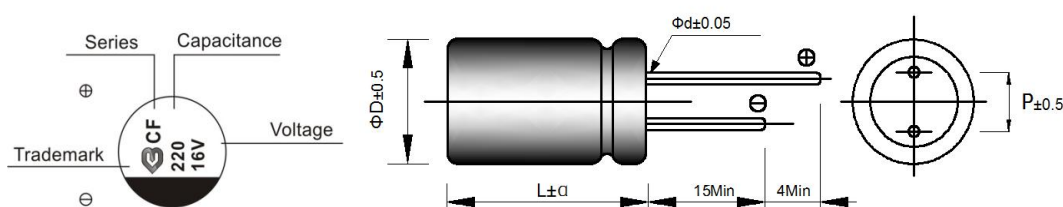


**CF Series**

- Ultra low impedance, high ripple, miniaturized
- Load life of 3000 hours at 105℃
- RoHS Compliant

**规格表 Specifications**

| 项目Items                                                            | 特性参数Characteristics                                                                                                                                                                                                                                                                                                                              |                              |                |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------|
| 使用温度范围<br>Category<br>Temperture Range                             | -55 ~ +105℃                                                                                                                                                                                                                                                                                                                                      |                              |                |
| 额定工作电压范围<br>Rated Voltage Range                                    | 2.5 ~ 25V                                                                                                                                                                                                                                                                                                                                        |                              |                |
| 静电容量允许偏差<br>Capacitance tolerance                                  | ±20%(M) (at 20℃,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℃)<br>I≤0.15CV 或120μA（取大值）（The bigger）（The bigger）<br>After 2 minutes applied for rated voltage at 20℃, less than or equal to the specified value.                                                                                                                                                                    |                              |                |
| 损耗角正切值tanδ<br>Dissipation Factor                                   | Rated voltage (V)                                                                                                                                                                                                                                                                                                                                | 2.5~25                       | (at 20℃,120Hz) |
|                                                                    | tanδ (Max.)                                                                                                                                                                                                                                                                                                                                      | 0.10                         |                |
| 温度特性<br>Low Temperture<br>Characteristics<br>(Max.Impedance Ratio) | Z(-25℃)/Z(+20℃)                                                                                                                                                                                                                                                                                                                                  | ≤1.25                        | (100KHz)       |
|                                                                    | Z(-55℃)/Z(+20℃)                                                                                                                                                                                                                                                                                                                                  | ≤1.25                        |                |
| 耐久性<br>Endurance                                                   | 105℃施加额定工作电压3000小时，恢复到20℃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℃ after the rated voltage is applied for 3000 hours at 105℃.                                                                                                                                                        |                              |                |
|                                                                    | 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         |                |
| 耐湿负荷特性<br>Damp Heat<br>(Steady State)                              | 在60℃ 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℃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℃ after the rated voltage is applied for 1000 hours at 60℃, 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<br>(Surge Voltage)                                          | 浪涌电压=额定电压* 1.15(V)<br>Surge Voltage=Rated voltage * 1.15(V)<br>在105℃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<br>The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages specified at 105℃ 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 |     |     |     |

**CF Series**◆ 尺寸与最大纹波电流一览表 **Standard Ratings**

| Rated voltage (V) | Rated capacitance(uF) | Case size<br>ΦD*L(mm) | ESR(mΩ)<br>at 20℃, 100 KHz | Rated ripple current<br>(mA <sub>rms</sub> /105℃/100kHz) |
|-------------------|-----------------------|-----------------------|----------------------------|----------------------------------------------------------|
| 2.5<br>(0B)       | 330                   | 5*7                   | 18                         | 2690                                                     |
|                   | 470                   | 5*7                   | 18                         | 2690                                                     |
|                   | 560                   | 6.3*8                 | 18                         | 2690                                                     |
|                   | 680                   | 6.3*8                 | 18                         | 2690                                                     |
| 4<br>(0G)         | 220                   | 5*7                   | 18                         | 2690                                                     |
|                   | 330                   | 5*7                   | 18                         | 2690                                                     |
|                   | 470                   | 6.3*8                 | 18                         | 2690                                                     |
|                   | 560                   | 6.3*8                 | 18                         | 2690                                                     |
| 6.3<br>(0J)       | 220                   | 5*7                   | 18                         | 2500                                                     |
|                   | 330                   | 5*7                   | 18                         | 2500                                                     |
|                   | 330                   | 6.3*8                 | 16                         | 2900                                                     |
|                   | 470                   | 6.3*8                 | 16                         | 2900                                                     |
|                   | 560                   | 6.3*8                 | 16                         | 3100                                                     |
|                   | 680                   | 6.3*8                 | 16                         | 3100                                                     |
| 10<br>(1A)        | 100                   | 5*7                   | 18                         | 2690                                                     |
|                   | 150                   | 5*7                   | 18                         | 2690                                                     |
|                   | 270                   | 6.3*8                 | 16                         | 4100                                                     |
|                   | 330                   | 6.3*8                 | 16                         | 4100                                                     |
| 16<br>(1C)        | 100                   | 5*7                   | 20                         | 2690                                                     |
|                   | 100                   | 6.3*8                 | 18                         | 2900                                                     |
|                   | 220                   | 6.3*8                 | 16                         | 2900                                                     |
| 25<br>(1E)        | 22                    | 5*7                   | 45                         | 2670                                                     |
|                   | 33                    | 5*7                   | 40                         | 2670                                                     |
|                   | 33                    | 6.3*8                 | 40                         | 2900                                                     |
|                   | 47                    | 6.3*8                 | 40                         | 2900                                                     |

◆ 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            |