

# NS (CD71C)

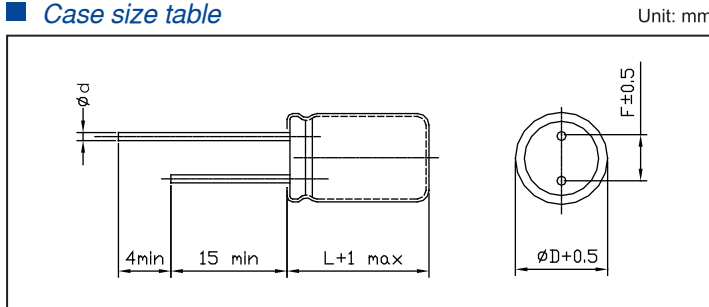
- ⊙ 7mmL, Bi-Polari.
- ⊙ Used in circuits what polarity is reversed, such as signal coupling, etc.
- ⊙ Adapted to the ROHS directive (2002/95/EC).



## Specifications

| Item  | Performance Characteristics   |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
|---|---|-----------|------|------|------|------|------|----|----|--------------|------|------|------|------|------|------|------|--------------|---|---|---|---|---|---|---|
| Operating temperature range                               | -40°C ~ +85°C   |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Rated voltage range                                       | 6.3 ~ 63V   |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Nominal capacitance range                                 | 0.1 ~ 100μF   |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Capacitance tolerance                                     | ± 20% (120Hz, +20°C)  |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Leakage current   | $I \leq 0.05CV$ or $10(\mu A)$ (at 20°C, after 2 minutes) (whichever is greater)  |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Dissipation factor (+20°C, 120Hz)<br>(tg δ)               | <table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.26</td> <td>0.22</td> <td>0.20</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>  | $U_R$ (V) | 6.3  | 10   | 16   | 25   | 35   | 50 | 63 | tg δ         | 0.26 | 0.22 | 0.20 | 0.18 | 0.16 | 0.14 | 0.12 |              |   |   |   |   |   |   |   |
|   | $U_R$ (V)   | 6.3       | 10   | 16   | 25   | 35   | 50   | 63 |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| tg δ  | 0.26  | 0.22      | 0.20 | 0.18 | 0.16 | 0.14 | 0.12 |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Temperature characteristics<br>(Impedance ratio at 120Hz) | <table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> | $U_R$ (V) | 6.3  | 10   | 16   | 25   | 35   | 50 | 63 | Z-25°C/+20°C | 4    | 3    | 2    | 2    | 2    | 2    | 2    | Z-40°C/+20°C | 8 | 6 | 4 | 4 | 3 | 3 | 3 |
|   | $U_R$ (V)   | 6.3       | 10   | 16   | 25   | 35   | 50   | 63 |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
|   | Z-25°C/+20°C  | 4         | 3    | 2    | 2    | 2    | 2    | 2  |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Z-40°C/+20°C  | 8   | 6         | 4    | 4    | 3    | 3    | 3    |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Load life   | After applying rated voltage for 1000 hours at +85°C (with the polarity inverted every 250 hours) and then resumed 16 hours:<br>Capacitance change : ±25% Initial measured value<br>Leakage current : ≤ Initial specified value<br>Dissipation factor : ≤ 2 times Initial specified value   |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |
| Shelf life  | After storage for 1000 hours at +85°C and then resumed 16 hours<br>Capacitance change : ±25% Initial measured value<br>Leakage current : ≤ 2 times Initial specified value<br>Dissipation factor : ≤ 2 times Initial specified value  |           |      |      |      |      |      |    |    |              |      |      |      |      |      |      |      |              |   |   |   |   |   |   |   |

## Case size table



| D | 4    | 5   | 6   | 8   |
|---|------|-----|-----|-----|
| F | 1.5  | 2.0 | 2.5 | 3.5 |
| d | 0.45 |     |     | 0.5 |

## Dimensions

| $C_R(\mu F)$ | Code | $U_R$ |     |     |     |     |     |     |    |     |     |     |
|--------------|------|-------|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|
|              |      | 6.3V  | 10V | 16V | 25V | 35V | 50V | 63V |    |     |     |     |
| 0.1          | 0R1  |       |     |     |     |     |     |     |    |     |     |     |
| 0.22         | R22  |       |     |     |     |     |     |     |    | 4x7 | 0.8 |     |
| 0.33         | R33  |       |     |     |     |     |     |     |    | 4x7 | 2.0 |     |
| 0.47         | R47  |       |     |     |     |     |     |     |    | 4x7 | 3.0 |     |
| 1            | 010  |       |     |     |     |     |     |     |    | 4x7 | 4.0 |     |
| 2.2          | 2R2  |       |     |     |     |     |     |     |    | 4x7 | 8.5 | 4x7 |
| 3.3          | 3R3  |       |     |     |     |     |     |     |    | 4x7 | 14  | 5x7 |
| 4.7          | 4R7  |       |     |     |     |     |     |     |    | 5x7 | 19  | 6x7 |
| 10           | 100  |       |     |     |     |     |     |     |    | 5x7 | 25  | 8x7 |
| 22           | 220  | 4x7   | 29  | 4x7 | 33  | 6x7 | 39  | 6x7 | 43 | 8x7 | 48  |     |
| 33           | 330  | 5x7   | 37  | 5x7 | 45  | 6x7 | 48  | 8x7 | 53 |     |     |     |
| 47           | 470  | 6x7   | 48  | 5x7 | 53  | 8x7 | 63  |     |    |     |     |     |
| 100          | 101  | 8x7   | 75  | 6x7 | 82  |     |     |     |    |     |     |     |

Rated ripple current(mA, +85°C, 120Hz)