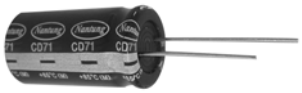
# CD71 SERIES

## ALUMINUM ELECTROLYTIC CAPACITORS

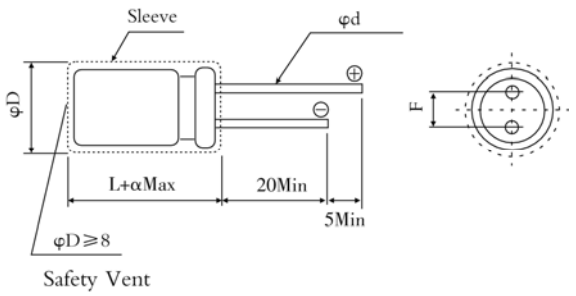


- Load life of 2000 hours at 85℃
- Bi-polarized standard
- Used in polarity reverses and change circuits

### ■SPECIFICATIONS

| Item | Characteristics |
|---|---|
| **Operating Temperature Range(℃)** | -40~+85 |
| **Rated Voltage Range (V)** | 6.3~160 |
| **Nominal capacitance range (μF)** | 0.1~4700 |
| **Capacitance Tolerance(20℃,100Hz)** | ±20% |
| **Leakage Current (μA)** | I≤0.03CV or 3 whichever is greater (at 20℃ ,after 5 minutes)<br>C: Nominal Capacitance (μF) V: Rated Voltage (V) |
| **Dissipation Factor(20℃,120Hz)** | Rated Voltage (v): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 / 160<br>tanδ: 0.24 / 0.24 / 0.20 / 0.20 / 0.16 / 0.14 / 0.12 / 0.10 / 0.15 |
| **Temperature Stability(120Hz)** | Rated Voltage (v): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 / 160<br>Impedance Ratio Z-25℃/Z+20℃: 4 / 3 / 2 / 4<br>Impedance Ratio Z-40℃/Z+20℃: 10 / 8 / 6 / 4 / 3 / - |
| **Load Life(+85℃)** | Time: 2000 hours. (Polarity inverts for every 250 hours)<br>Leakage Current: Not more than the specified value.<br>Capacitance Change: within ±20% of the initial value.<br>Dissipation Factor: Not more than 150% of the specified value. |
| **Shelf Life(+85℃)** | Time: 500 hours.<br>Leakage Current: Not more than the specified value.<br>Capacitance Change: within ±20% of the initial value.<br>Dissipation Factor: Not more than 150% of the specified value.<br>After test: Rated voltage to be applied for 30 minutes, 24 to 48 hours before measurement. |

### ■ DIMENSIONS MM




**Lead spacing and diameter**

| ΦD | ±0.5 | | | ±1.0 | | | |
|---|---|---|---|---|---|---|---|
| | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
| F±0.5 | 2 | 2.5 | 3.5 | 5 | | 7.5 | |
| Φd±0.1 | 0.5 | | 0.6 | | | 0.8 | |
| a | 0~+2.0 | | | | | | |

### ■ MULTIPLIER FOR RIPPLE CURRENT

**Frequency coefficient**

| Rated Voltage(V) \ Freq(Hz) | 50,60 | 120 | 1K | 10K | 100K |
|---|---|---|---|---|---|
| 6.3~16 | 0.80 | 1 | 1.1 | 1.2 | 1.2 |
| 25~35 | 0.80 | 1 | 1.5 | 1.7 | 1.7 |
| 50~160 | 0.80 | 1 | 1.6 | 1.9 | 1.9 |

**Temperature coefficient**

| Temperature | +70 | +85 |
|---|---|---|
| Coefficient | 1.35 | 1 |

## ■ STANDARD RATINGS

| WV(V) | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | | 63 | | 100 | | 160 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cap (μF) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) | Size ΦDxL (mm) | Ripple (mA) |
| 0.1 | - | - | - | - | - | - | - | - | - | - | 5x11 | 4 | - | - | 5x11 | 5 | - | - |
| 0.22 | - | - | - | - | - | - | - | - | - | - | 5x11 | 7 | - | - | 5x11 | 8 | - | - |
| 0.33 | - | - | - | - | - | - | - | - | - | - | 5x11 | 8 | - | - | 5x11 | 9 | - | - |
| 0.47 | - | - | - | - | - | - | - | - | - | - | 5x11 | 10 | - | - | 5x11 | 11 | - | - |
| 1 | - | - | - | - | - | - | - | - | - | - | 5x11 | 14 | - | - | 5x11 | 16 | - | - |
| 2.2 | - | - | - | - | - | - | - | - | - | - | 5x11 | 21 | 5x11 | 23 | 5x11 | 24 | - | - |
| 3.3 | - | - | - | - | - | - | - | - | - | - | 5x11 | 26 | 5x11 | 28 | 6.3x11 | 34 | 10x16 | 49 |
| 4.7 | - | - | - | - | - | - | 5x11 | 28 | 5x11 | 28 | 5x11 | 31 | 5x11 | 34 | 6.3x11 | 41 | 10x16 | 59 |
| 10 | - | - | - | - | 5x11 | 39 | 5x11 | 40 | 5x11 | 42 | 5x11 | 45 | 6.3x11 | 57 | 8x11.5 | 70 | 12.5x20 | 109 |
| 22 | - | - | 5x11 | 52 | 5x11 | 58 | 5x11 | 60 | 6.3x11 | 71 | 6.3x11 | 77 | 8x11.5 | 89 | 10x12.5 | 136 | 12.5x25 | 177 |
| 33 | 5x11 | 58 | 5x11 | 63 | 5x11 | 71 | 6.3x11 | 84 | 6.3x11 | 87 | 8x11.5 | 111 | 10x12.5 | 144 | 10x16 | 181 | 16x25 | 240 |
| 47 | 5x11 | 69 | 5x11 | 75 | 6.3x11 | 97 | 6.3x11 | 100 | 8x11.5 | 122 | 10x12.5 | 157 | 10x16 | 188 | 12.5x20 | 248 | 16x35.5 | 329 |
| 100 | 6.3x11 | 115 | 6.3x11 | 126 | 8x11.5 | 167 | 10x12.5 | 204 | 10x12.5 | 212 | 10x20 | 273 | 12.5x20 | 343 | 16x25 | 458 | 18x35.5 | 425 |
| 220 | 8x11.5 | 202 | 8x11.5 | 221 | 10x12.5 | 294 | 10x16 | 332 | 10x20 | 375 | 12.5x25 | 506 | 16x25 | 645 | 18x35.5 | 837 | - | - |
| 330 | 8x11.5 | 247 | 10x12.5 | 322 | 10x16 | 394 | 10x20 | 444 | 12.5x20 | 526 | 12.5x25 | 620 | - | - | - | - | - | - |
| 470 | 10x12.5 | 350 | 10x16 | 420 | 10x20 | 513 | 12.5x20 | 607 | 12.5x25 | 685 | 16x25 | 861 | - | - | - | - | - | - |
| 1000 | 10x20 | 611 | 12.5x20 | 767 | 12.5x25 | 935 | 16x25 | 1120 | 16x31.5 | 1270 | - | - | - | - | - | - | - | - |
| 2200 | 12.5x25 | 1090 | 16x25 | 1380 | 16x31.5 | 1660 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3300 | 16x25 | 1490 | 16x31.5 | 1760 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4700 | 16x31.5 | 1880 | 18x35.5 | 2280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

■ Ripple Current: 85℃,100Hz or 120Hz.

The specific capacitance and case size are available on request.