

# CE-LL Series

Long Life

Low Impedance

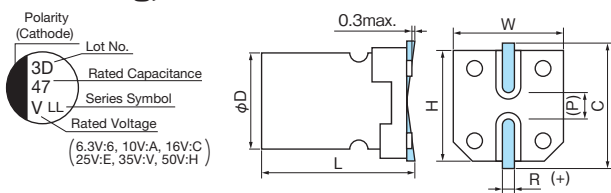


- 105°C 7,000 to 10,000hours
- Solvent proof (within 2 minutes)
- AEC-Q200

## Specifications

| Items                              | Condition                                                   |       |                                             | Specifications                                                                               |      |      |      |      |      |
|------------------------------------|-------------------------------------------------------------|-------|---------------------------------------------|----------------------------------------------------------------------------------------------|------|------|------|------|------|
| Rated voltage (V)                  | —                                                           |       |                                             | 6.3                                                                                          | 10   | 16   | 25   | 35   | 50   |
| Surge voltage (V)                  | Room temperature                                            |       |                                             | 8.0                                                                                          | 13   | 20   | 32   | 44   | 63   |
| Category temperature range (°C)    | —                                                           |       |                                             | -40 to +105                                                                                  |      |      |      |      |      |
| Capacitance tolerance (%)          | 120Hz/20°C                                                  |       |                                             | M : ±20                                                                                      |      |      |      |      |      |
| Dissipation Factor(tan δ)          | tanδ(max.) 120Hz/20°C                                       |       |                                             | 0.32                                                                                         | 0.28 | 0.26 | 0.16 | 0.14 | 0.14 |
| Leakage current(LC)                | μA/after 2minutes (max.), 20°C                              |       |                                             | The greater value of either 0.01CV or 3                                                      |      |      |      |      |      |
| Impedance ratio at low temperature | Based on the value at 120Hz, +20°C                          | -25°C | Z/Z <sub>20°C</sub>                         | 4                                                                                            | 3    | 2    | 2    | 2    | 2    |
| Endurance                          | 105°C rated voltage applied (With the rated ripple current) | Test  | φD ≤ 6.3 : 7,000hours, φD ≥ 8 : 10,000hours |                                                                                              |      |      |      |      |      |
|                                    |                                                             | ΔC/C  | Within ±30% of the initial value            |                                                                                              |      |      |      |      |      |
|                                    |                                                             | tanδ  | Less than 300% of the specified value       |                                                                                              |      |      |      |      |      |
|                                    |                                                             | LC    | Less than the specified value               |                                                                                              |      |      |      |      |      |
| Shelf Life                         | 105°C, 1,000hours(with no voltage load)                     |       |                                             | Shall meet the endurance spec above after voltage treatment at 20deg.C per JIS C 5101-4 4.1. |      |      |      |      |      |

## Marking, Dimensions



A pressure relief vent is provided for φD=8 or bigger

(P)reference size

(Unit : mm)

| D <sup>±0.5</sup> | L <sup>±0.3</sup> | W <sup>±0.2</sup> | H <sup>±0.2</sup> | C <sup>±0.2</sup> | R          | P   |
|-------------------|-------------------|-------------------|-------------------|-------------------|------------|-----|
| 5                 | 7.0               | 5.3               | 5.3               | 6.0               | 0.5 to 0.8 | 1.4 |
| 6.3               | 7.0               | 6.6               | 6.6               | 7.3               | 0.5 to 0.8 | 2.2 |
| 6.3               | 8.4               | 6.6               | 6.6               | 7.3               | 0.5 to 0.8 | 2.2 |
| 8                 | 10.2              | 8.3               | 8.3               | 9.0               | 0.7 to 1.0 | 3.2 |
| 10                | 10.2              | 10.3              | 10.3              | 11.0              | 1.0 to 1.4 | 4.6 |

## Size, Impedance, Rated Ripple Current

| μF \ V | 6.3              | 10              | 16               | 25               | 35               | 50               |
|--------|------------------|-----------------|------------------|------------------|------------------|------------------|
| 10     |                  |                 |                  |                  | 5×7.0 2.2 95     |                  |
| 22     |                  |                 | 5×7.0 2.2 95     | 5×7.0 2.2 95     | 5×7.0 2.2 95     | 6.3×8.4 1.8 100  |
| 33     |                  | 5×7.0 2.2 95    |                  | 6.3×7.0 1.1 140  | 6.3×8.4 1.0 230  | 8×10.2 0.53 350  |
| 47     | 5×7.0 2.2 95     |                 | 6.3×7.0 1.1 140  | 6.3×7.0 1.1 140  | 6.3×8.4 1.0 230  | 8×10.2 0.53 350  |
| 100    | 6.3×7.0 1.1 140  |                 | 6.3×7.0 1.1 140  | 6.3×8.4 1.0 230  | 8×10.2 0.22 600  | 10×10.2 0.35 670 |
| 150    |                  | 6.3×7.0 1.1 140 | 6.3×8.4 1.0 230  | 8×10.2 0.22 600  |                  |                  |
| 220    | 6.3×8.4 1.0 230  |                 | 6.3×8.4 1.0 230  | 8×10.2 0.22 600  | 10×10.2 0.16 850 |                  |
| 330    | 6.3×8.4 1.0 230  |                 | 8×10.2 0.22 600  | 10×10.2 0.16 850 |                  |                  |
| 470    | 8×10.2 0.22 600  |                 | 10×10.2 0.16 850 |                  |                  |                  |
| 1000   | 10×10.2 0.16 850 |                 |                  |                  |                  |                  |

Please refer to page 14 for ripple current frequency coefficients.

Impedance(Ω)  
max. at 100kHz, 20°C

Rated ripple current  
mA<sub>rms</sub>(100kHz, 105°C)

Case size:φD×L(mm)

## Part number

