

EN Series

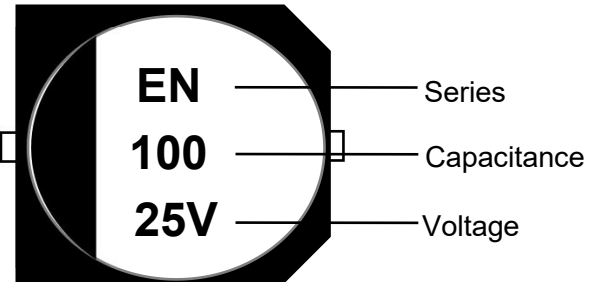
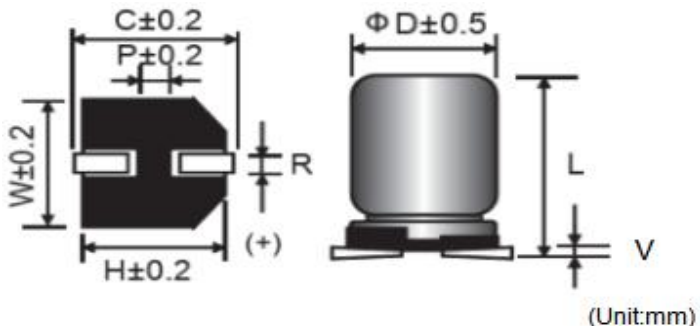
Feature

- ◆ AEC-Q200 compliant.
- ◆ Guaranteed duration: 5000 hours at 105°C.
- ◆ Long life.
- ◆ Suitable for SMT Process.
- ◆ RoHS compliant.

| Items | Characteristics | | | | | | | | |
|---|---|------------------------------------|------|------|------|------|---------------------------|--|----------------------------------|
| Temperature Range | -40°C ~ +105°C | | | | | | | | |
| Rated Voltage Range | 6.3V ~ 50V | | | | | | | | |
| Capacitance Range | 1 ~ 1000 μF | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | |
| Leakage Current | I ≤ 0.01CV or 3μA, Take the larger of the two values (after applying the rated working voltage for 2 minutes) CR: nominal capacitance (μF) UR: rated voltage (V). | | | | | | | | |
| Dissipation Factor (tg δ) (20°C, 120Hz) | U _R (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | |
| | tg δ | 0.32 | 0.28 | 0.22 | 0.16 | 0.13 | 0.12 | | |
| Endurance | After storing the capacitor at 105°C without voltage application for 5000 hours, the capacitor shall meet the above endurance requirements after being recovered to 20°C. | | | | | | | | |
| | Capacitance Change | within ±30% of the initial value | | | | | | | |
| | Dissipation Factor | ≤ 300% of the initial ralted value | | | | | | | |
| | Leakage Current | ≤ initial ralted value | | | | | | | |
| High temperature storage | After storing the capacitor at 105°C without voltage application for 1000 hours, the capacitor shall meet the above endurance requirements after being recovered to 20°C. | | | | | | | | |
| Low Temperature | U _R (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | |
| | Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | | |
| | Z(-40°C)/Z(20°C) | 10 | 7 | 5 | 3 | 3 | 3 | | |
| Resistance to soldering heat | Place the capacitor on a hot plate at 250°C and hold for 30 seconds. Then remove the capacitor from the hot plate and allow it to recover at room temperature. The capacitor shall meet the requirements listed on the right. | | | | | | Capacitance Change | | within ±10% of the initial value |
| | | | | | | | Dissipation Factor (tg δ) | | ≤ initial ralted value |
| | | | | | | | Leakage Current | | ≤ initial ralted value |

Coefficient of Frequency for Rated Ripple Current

| Frequency (Hz) | 100 ≦ F < 1K | 1K ≦ F < 10K | 10K ≦ F < 100K | 100K ≦ F |
|----------------|--------------|--------------|----------------|----------|
| 4.7~33 | 1.00 | 1.20 | 1.30 | 1.45 |
| >33 | 1.00 | 1.10 | 1.20 | 1.30 |

| Mark | Appearance & Dimension |
|--|---|
|  <p>EN — Series</p> <p>100 — Capacitance</p> <p>25V — Voltage</p> |  <p>(Unit:mm)</p> |

| Dimensions | ΦD | L | W | H | C | R | P | Vmax |
|------------|-----|----------|------|------|------|---------|-----|------|
| 4x6 | 4 | 6.0±0.3 | 4.3 | 4.3 | 5.0 | 0.5~0.8 | 1.0 | 0.3 |
| 5x6 | 5 | 6.0±0.3 | 5.3 | 5.3 | 6.0 | 0.5~0.8 | 1.4 | 0.3 |
| 6.3x6 | 6.3 | 6.0±0.3 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.1 | 0.3 |
| 6.3x7.7 | 6.3 | 7.7±0.3 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.1 | 0.3 |
| 8x10 | 8 | 10.0±0.5 | 8.3 | 8.3 | 9.0 | 0.7~1.1 | 3.2 | 0.3 |
| 10x10 | 10 | 10.0±0.5 | 10.3 | 10.3 | 11.0 | 0.7~1.3 | 4.5 | 0.3 |

EN Characteristics Table

| Rated Voltage (V.DC) | Capacitance (±20%) (μF) | Dimensions(mm) | | Electrical Characteristics | | Minimum Packaging Quantity (PCS) |
|-------------------------|-------------------------------|----------------|-----|--|----------------------|--|
| | | ΦD | L | Rated Ripple Current (120Hz/105℃) (mA r.m.s) | tan δ (120Hz/20℃) | |
| 6.3 | 33 | 5 | 6 | 35 | 0.32 | 1000 |
| | 47 | 5 | 6 | 36 | 0.32 | 1000 |
| | 100 | 6.3 | 6 | 60 | 0.32 | 1000 |
| | 220 | 6.3 | 7.7 | 101 | 0.32 | 1000 |
| | 330 | 8 | 10 | 160 | 0.32 | 500 |
| | 470 | 10 | 10 | 260 | 0.32 | 500 |
| | 1000 | 10 | 10 | 260 | 0.32 | 500 |
| 10 | 10 | 5 | 6 | 30 | 0.28 | 1000 |
| | 22 | 5 | 6 | 35 | 0.28 | 1000 |
| | 33 | 6.3 | 6 | 50 | 0.28 | 1000 |
| | 47 | 6.3 | 7.7 | 81 | 0.28 | 1000 |
| | 100 | 8 | 10 | 140 | 0.28 | 500 |
| | 220 | 10 | 10 | 240 | 0.28 | 500 |
| | 330 | 10 | 10 | 280 | 0.28 | 500 |
| 16 | 4.7 | 4 | 6 | 18 | 0.22 | 2000 |
| | 10 | 5 | 6 | 30 | 0.22 | 1000 |
| | 22 | 6.3 | 6 | 48 | 0.22 | 1000 |
| | 33 | 6.3 | 6 | 50 | 0.22 | 1000 |
| | 47 | 6.3 | 7.7 | 81 | 0.22 | 1000 |
| | 100 | 10 | 10 | 216 | 0.22 | 500 |
| | 220 | 10 | 10 | 300 | 0.22 | 500 |
| 25 | 330 | 10 | 10 | 320 | 0.22 | 500 |
| | 4.7 | 5 | 6 | 25 | 0.16 | 1000 |
| | 10 | 6.3 | 6 | 42 | 0.16 | 1000 |
| | 22 | 6.3 | 6 | 48 | 0.16 | 1000 |
| | 33 | 6.3 | 7.7 | 63 | 0.16 | 1000 |
| | 47 | 8 | 10 | 116 | 0.16 | 500 |
| | 100 | 10 | 10 | 240 | 0.16 | 500 |
| 35 | 220 | 10 | 10 | 375 | 0.16 | 500 |
| | 3.3 | 4 | 6 | 15 | 0.13 | 2000 |
| | 4.7 | 5 | 6 | 25 | 0.13 | 1000 |
| | 10 | 6.3 | 6 | 42 | 0.13 | 1000 |
| | 22 | 6.3 | 7.7 | 57 | 0.13 | 1000 |
| | 33 | 8 | 10 | 92 | 0.13 | 500 |
| | 47 | 10 | 10 | 150 | 0.13 | 500 |
| 50 | 100 | 10 | 10 | 280 | 0.13 | 500 |
| | 1 | 4 | 6 | 6 | 0.12 | 2000 |
| | 2.2 | 4 | 6 | 11 | 0.12 | 2000 |
| | 3.3 | 4 | 6 | 14 | 0.12 | 2000 |
| | 4.7 | 5 | 6 | 19 | 0.12 | 1000 |
| | 10 | 6.3 | 6 | 30 | 0.12 | 1000 |
| | 22 | 6.3 | 7.7 | 49 | 0.12 | 1000 |
| | 33 | 8 | 10 | 80 | 0.12 | 500 |
| | 47 | 8 | 10 | 95 | 0.12 | 500 |
| 100 | 10 | 10 | 160 | 0.12 | 500 | |