

CHIP TYPE

CT

Series

Surface Mounted Device

JAMICON®

Features

- 105°C 1000hours.
- For high density mounting.

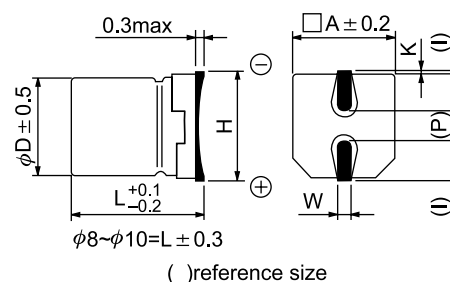


SPECIFICATION

| Item | Characteristic | | | | | | | | |
|--|---|--|------|------|-----------------------------------|------|------|------|--|
| Operation Temperature Range | -55 ~ +105°C | | | | | | | | |
| Rated Working Voltage | 6.3 ~ 50VDC | | | | | | | | |
| Capacitance Tolerance (120Hz 20°C) | ±20%(M) | | | | | | | | |
| Leakage Current (20°C) | $I \leq 0.01CV$ or $3 (\mu A)$ | | | | I : Leakage Current (μA) | | | | |
| | *Whichever is greater after 2 minutes | | | | C : Rated Capacitance (μF) | | | | |
| | | | | | V : Working Voltage (V) | | | | |
| Surge Voltage (20°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | | |
| | S.V. | 8 | 13 | 20 | 32 | 44 | 63 | | |
| Dissipation Factor ($\tan \delta$) (120Hz 20°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | | |
| | $\tan \delta$ | $\phi 4 \sim \phi 6.3$ | 0.30 | 0.22 | 0.16 | 0.14 | 0.12 | 0.12 | |
| | | $\phi 8 \sim \phi 10$ | 0.35 | 0.26 | 0.20 | 0.16 | 0.14 | 0.12 | |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | | | | |
| | Rated Voltage (V) | | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | -25°C / +20°C | | 4 | 3 | 2 | 2 | 2 | 2 | |
| | -40°C / +20°C | | 8 | 6 | 4 | 4 | 3 | 3 | |
| Load Life | After 1000 hours application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage \leq rate working voltage) | | | | | | | | |
| | Capacitance Change | $\leq \pm 30\%$ of initial value for 6.3 W.V., $\leq \pm 25\%$ of initial value for 10~50 W.V. | | | | | | | |
| | Dissipation Factor | $\leq 200\%$ of initial specified value | | | | | | | |
| | Leakage current | \leq initial specified value | | | | | | | |
| Shelf Life | At +105°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment) | | | | | | | | |
| Resistance to Soldering Heat | Capacitor placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature. | | | | | | | | |
| | Capacitance Change | $\leq \pm 10\%$ of initial value | | | | | | | |
| | Dissipation Factor | \leq initial specified value | | | | | | | |
| | Leakage current | \leq initial specified value | | | | | | | |

DIMENSIONS (mm)

| D | L | A | H | I | W | P | K |
|------|------|------|---------|-----|----------|-----|--|
| 4.0 | 5.4 | 4.3 | 5.5MAX | 1.8 | 0.65±0.1 | 1.0 | 0.35 ^{+0.15} _{-0.20} |
| 5.0 | 5.4 | 5.3 | 6.5MAX | 2.2 | 0.65±0.1 | 1.5 | 0.35 ^{+0.15} _{-0.20} |
| 6.3 | 5.4 | 6.6 | 7.8MAX | 2.6 | 0.65±0.1 | 2.1 | 0.35 ^{+0.15} _{-0.20} |
| 8.0 | 6.2 | 8.3 | 9.5MAX | 3.4 | 0.65±0.1 | 2.2 | 0.35 ^{+0.15} _{-0.20} |
| 8.0 | 10.2 | 8.3 | 10.0MAX | 3.4 | 0.90±0.2 | 3.1 | 0.70 ^{+0.15} _{-0.20} |
| 10.0 | 10.2 | 10.3 | 12.0MAX | 3.5 | 0.90±0.2 | 4.6 | 0.70 ^{+0.15} _{-0.20} |



● CASE SIZE & MAX RIPPLE CURRENT

 Case size : D x L (mm)
 Max ripple current : mA(rms) 105°C 120Hz

| μF | V(Code) Code | Item | 6.3 (0J) | | 10 (1A) | | 16 (1C) | | 25 (1E) | | 35 (1V) | | 50 (1H) | |
|------|-----------------|------|-------------------|------------|-------------------|------------|-------------------|------------|-------------------|------------|-------------------|------------|-------------------|------------|
| | | | DxL | R.C. | DxL | R.C. | DxL | R.C. | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 0.1 | | 0R1 | | | | | | | | | | | 4x5.4 | 2 |
| 0.22 | | R22 | | | | | | | | | | | 4x5.4 | 4 |
| 0.33 | | R33 | | | | | | | | | | | 4x5.4 | 4 |
| 0.47 | | R47 | | | | | | | | | | | 4x5.4 | 5 |
| 1.0 | | 010 | | | | | | | | | | | 4x5.4 | 8 |
| 2.2 | | 2R2 | | | | | | | | | | | 4x5.4 | 11 |
| 3.3 | | 3R3 | | | | | | | | | | | 4x5.4 | 14 |
| 4.7 | | 4R7 | | | | | | | 4x5.4 | 14 | 4x5.4 | 15 | 5x5.4 | 19 |
| 10 | | 100 | | | | 4x5.4 | 19 | 5x5.4 | 23 | 5x5.4 | 25 | 6.3x5.4 | 31 | |
| 22 | | 220 | 4x5.4 | 23 | 5x5.4 | 29 | 5x5.4 | 32 | 6.3x5.4 | 39 | 6.3x5.4 | 42 | 8x6.2 | 60 |
| 33 | | 330 | 5x5.4 | 32 | 5x5.4 | 35 | 6.3x5.4 | 45 | 6.3x5.4 | 48 | 6.3x5.4 8x6.2 | 50 70 | 8x10.2 | 90 |
| 47 | | 470 | 5x5.4 | 38 | 6.3x5.4 | 48 | 6.3x5.4 | 55 | 6.3x5.4 8x6.2 | 60 75 | 8x10.2 | 100 | 8x10.2 10x10.2 | 110 120 |
| 100 | | 101 | 6.3x5.4 | 65 | 6.3x5.4 8x6.2 | 70 90 | 6.3x5.4 8x10.2 | 80 120 | 8x10.2 | 140 | 8x10.2 10x10.2 | 150 170 | 8x10.2 10x10.2 | 160 180 |
| 220 | | 221 | 6.3x5.4 | 95 | 8x10.2 | 160 | 8x10.2 10x10.2 | 180 210 | 8x10.2 10x10.2 | 200 230 | 8x10.2 10x10.2 | 220 250 | 10x10.2 | 270 |
| 330 | | 331 | 8x10.2 | 170 | | | 8x10.2 10x10.2 | 220 260 | 8x10.2 10x10.2 | 250 290 | 10x10.2 | 300 | | |
| 470 | | 471 | | | 8x10.2 10x10.2 | 230 270 | 8x10.2 10x10.2 | 270 300 | 10x10.2 | 340 | | | | |
| 1000 | | 102 | 8x10.2 10x10.2 | 290 340 | | | | | | | | | | |
| 1500 | | 152 | 10x10.2 | 410 | | | | | | | | | | |