

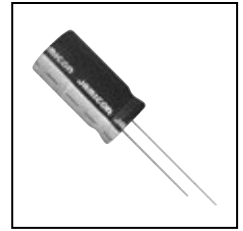
RADIAL TYPE

TL Series

Long Life, Low Impedance, High Reliability

JAMICON®

- Low impedance and long life with standing 5000 hours load life.
- Suitable for electronic ballast, adaptor and switching power.

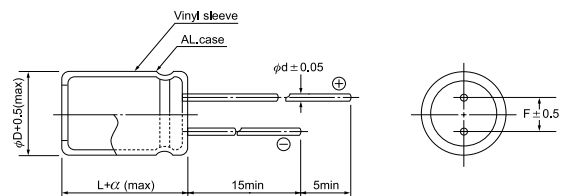


● SPECIFICATION

| Item | Characteristic | | | | | | | |
|--|---|-----------------------------------|------|------|---|------|------|------|
| Operation Temperature Range | -40 ~ +105°C | | | | | | | |
| Rated Working Voltage | 6.3 ~ 63VDC | | | | | | | |
| Capacitance Tolerance (120Hz 20°C) | ±20%(M) | | | | | | | |
| Leakage Current (20°C) | I ≤ 0.01CV or 3 (μA) Whichever is greater after 2 minutes | | | | I : Leakage Current (μA) C : Rated Capacitance (μF) V : Working Voltage (V) | | | |
| Surge Voltage (20°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 |
| | S.V. | 8 | 13 | 20 | 32 | 44 | 63 | 79 |
| Dissipation Factor (tan δ) (120Hz 20°C) | Add 0.02 per 1000 μF for more than 1000 μF | | | | | | | |
| | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 |
| | tan δ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | | | |
| | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 |
| | -25°C / +20°C | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | -40°C / +20°C | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Load Life | After hours (φ5~6.3mm 2000 hours, φ8mm 3000 hours, φD≥10mm 5000 hours) application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rated working voltage) | | | | | | | |
| | Capacitance Change | ≤ ±25% of initial value | | | | | | |
| | Dissipation Factor | ≤ 200% of initial specified value | | | | | | |
| | Leakage current | ≤ initial specified value | | | | | | |
| Shelf Life | At + 105°C no voltage application after 1000 hours the capacitor shall meet the following limits. (with voltage treatment) | | | | | | | |
| | Capacitance Change | ≤ ±20% of initial value | | | | | | |
| | Dissipation Factor | ≤ 200% of initial specified value | | | | | | |
| | Leakage current | ≤ 200% of initial specified value | | | | | | |

● DIMENSIONS (mm)

| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 |
|----|-----|-----|-----|-----|------|-----|
| F | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 |
| d | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 |
| α | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |



● RIPPLE CURRENT COEFFICIENTS

| Temperature(°c) | 65 | 75 | 85 | 95 | 105 |
|-----------------|------|------|------|------|------|
| Multiplier | 2.12 | 1.92 | 1.69 | 1.50 | 1.00 |

| Frequency(Hz) | 60 | 120 | 400 | 1k | 10k | 100k |
|---------------|------------|------|------|------|------|------|
| W.V. | Multiplier | | | | | |
| 6.3~16V | 0.45 | 0.60 | 0.83 | 0.94 | 0.98 | 1.00 |
| 25~35V | 0.38 | 0.50 | 0.75 | 0.90 | 0.97 | 1.00 |
| 50~63V | 0.36 | 0.46 | 0.70 | 0.88 | 0.94 | 1.00 |

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
 Max impedance : Ω 20°C 100kHz
 Max ripple current : A(rms) 105°C 100kHz

| V(Code) φD Code | | 6.3 (0J) | | | 10 (1A) | | | 16 (1C) | | |
|-----------------------|-----|----------|-------|------|---------|-------|------|---------|-------|------|
| | | DxL | IMP. | R.C. | DxL | IMP. | R.C. | DxL | IMP. | R.C. |
| 10 | 100 | | | | | | | 5x11 | 1.300 | 0.09 |
| 56 | 560 | | | | | | | 5x11 | 0.300 | 0.25 |
| 100 | 101 | 5x11 | 0.300 | 0.25 | 5x11 | 0.300 | 0.25 | 6.3x11 | 0.250 | 0.36 |
| 120 | 121 | 6.3x11 | 0.280 | 0.26 | 6.3x11 | 0.280 | 0.26 | 6.3x11 | 0.130 | 0.41 |
| 220 | 221 | 6.3x11 | 0.130 | 0.41 | 6.3x11 | 0.130 | 0.41 | 8x11.5 | 0.120 | 0.58 |
| 330 | 331 | 8x11.5 | 0.110 | 0.54 | 8x11.5 | 0.110 | 0.54 | 8x11.5 | 0.072 | 0.76 |
| 470 | 471 | 8x11.5 | 0.072 | 0.76 | 8x11.5 | 0.072 | 0.76 | 8x15 | 0.056 | 1.00 |
| | | 10x12.5 | 0.053 | 1.03 | 10x12.5 | 0.053 | 1.03 | 10x12.5 | 0.053 | 1.03 |
| 680 | 681 | 8x15 | 0.056 | 1.00 | 8x15 | 0.056 | 1.00 | 8x20 | 0.041 | 1.25 |
| | | 10x12.5 | 0.053 | 1.03 | 10x12.5 | 0.053 | 1.03 | 10x16 | 0.038 | 1.43 |
| 820 | 821 | 8x20 | 0.050 | 1.05 | 8x20 | 0.050 | 1.05 | 10x20 | 0.036 | 1.45 |
| 1000 | 102 | 8x20 | 0.041 | 1.25 | 8x20 | 0.041 | 1.25 | 10x20 | 0.023 | 1.82 |
| | | 10x16 | 0.038 | 1.43 | 10x16 | 0.038 | 1.43 | | | |
| 1200 | 122 | 10x20 | 0.023 | 1.82 | 10x20 | 0.023 | 1.82 | 10x25 | 0.022 | 2.15 |
| 1500 | 152 | 10x25 | 0.022 | 2.15 | 10x25 | 0.022 | 2.15 | 12.5x20 | 0.021 | 2.36 |
| 2200 | 222 | 12.5x20 | 0.021 | 2.36 | 12.5x20 | 0.021 | 2.36 | 12.5x25 | 0.018 | 2.77 |
| 3300 | 332 | 12.5x25 | 0.018 | 2.77 | 12.5x25 | 0.018 | 2.77 | 12.5x35 | 0.015 | 3.40 |
| 3900 | 392 | 12.5x30 | 0.016 | 3.29 | 12.5x30 | 0.016 | 3.29 | 16x25 | 0.016 | 3.46 |
| | | 16x20 | 0.018 | 3.14 | 16x20 | 0.018 | 3.14 | | | |
| 4700 | 472 | 12.5x35 | 0.015 | 3.40 | 12.5x35 | 0.015 | 3.40 | | | |
| 5600 | 562 | 16x25 | 0.016 | 3.46 | 16x25 | 0.016 | 3.46 | | | |

| V(Code) φD Code | | 25 (1E) | | | 35 (1V) | | |
|-----------------------|-----|---------|-------|------|---------|-------|------|
| | | DxL | IMP. | R.C. | DxL | IMP. | R.C. |
| 10 | 100 | 5x11 | 1.030 | 0.13 | 5x11 | 0.800 | 0.17 |
| 33 | 330 | 5x11 | 0.500 | 0.21 | 5x11 | 0.300 | 0.25 |
| 47 | 470 | 5x11 | 0.300 | 0.25 | 6.3x11 | 0.280 | 0.27 |
| 56 | 560 | 5x11 | 0.280 | 0.26 | 6.3x11 | 0.130 | 0.41 |
| 100 | 101 | 6.3x11 | 0.130 | 0.41 | 8x11.5 | 0.125 | 0.50 |
| 120 | 121 | 6.3x15 | 0.130 | 0.49 | 8x11.5 | 0.120 | 0.59 |
| 150 | 151 | 8x11.5 | 0.110 | 0.54 | 8x11.5 | 0.072 | 0.76 |
| 220 | 221 | 8x11.5 | 0.072 | 0.76 | 8x15 | 0.056 | 1.00 |
| | | | | | 10x12.5 | 0.053 | 1.03 |
| 330 | 331 | 8x15 | 0.056 | 1.00 | 10x16 | 0.038 | 1.43 |
| | | 10x12.5 | 0.053 | 1.03 | | | |
| 470 | 471 | 8x20 | 0.041 | 1.25 | 10x20 | 0.023 | 1.82 |
| | | 10x16 | 0.038 | 1.43 | | | |
| 560 | 561 | 10x20 | 0.036 | 1.50 | 10x25 | 0.022 | 2.15 |
| 680 | 681 | 10x20 | 0.023 | 1.82 | 12.5x20 | 0.021 | 2.36 |
| 820 | 821 | 10x25 | 0.022 | 2.15 | 12.5x20 | 0.020 | 2.45 |
| 1000 | 102 | 12.5x20 | 0.021 | 2.36 | 12.5x25 | 0.018 | 2.77 |
| 1200 | 122 | 12.5x20 | 0.019 | 2.46 | 12.5x30 | 0.016 | 3.29 |
| | | | | | 16x20 | 0.018 | 3.14 |
| 1500 | 152 | 12.5x25 | 0.018 | 2.77 | 12.5x35 | 0.015 | 3.40 |
| 1800 | 182 | 12.5x30 | 0.016 | 3.29 | 16x25 | 0.016 | 3.46 |
| | | 16x20 | 0.018 | 3.14 | | | |
| 2200 | 222 | 12.5x35 | 0.015 | 3.40 | | | |

| V(Code) φD Code | | 50 (1H) | | | 63 (1J) | | |
|-----------------------|-----|---------|-------|------|---------|-------|------|
| | | DxL | IMP. | R.C. | DxL | IMP. | R.C. |
| 22 | 220 | 5x11 | 0.340 | 0.24 | 6.3x11 | 0.726 | 0.22 |
| 33 | 330 | 6.3x11 | 0.320 | 0.28 | 6.3x15 | 0.564 | 0.30 |
| 47 | 470 | 6.3x11 | 0.310 | 0.34 | 8x11.5 | 0.453 | 0.38 |
| 56 | 560 | 6.3x11 | 0.140 | 0.39 | 8x11.5 | 0.404 | 0.42 |
| 100 | 101 | 8x11.5 | 0.074 | 0.72 | 10x16 | 0.264 | 0.54 |
| 120 | 121 | 8x15 | 0.061 | 0.95 | 10x16 | 0.220 | 0.73 |
| 150 | 151 | 10x12.5 | 0.061 | 0.98 | 10x16 | 0.187 | 0.80 |
| 180 | 181 | 8x20 | 0.046 | 1.19 | 10x20 | 0.153 | 0.90 |
| 220 | 221 | 10x16 | 0.042 | 1.37 | 10x25 | 0.133 | 1.08 |
| 330 | 331 | 10x25 | 0.028 | 1.87 | 12.5x20 | 0.113 | 1.33 |
| 470 | 471 | 12.5x20 | 0.027 | 2.05 | 12.5x25 | 0.091 | 1.66 |
| 560 | 561 | 12.5x25 | 0.023 | 2.41 | 16x25 | 0.074 | 2.19 |
| 680 | 681 | 12.5x30 | 0.021 | 2.86 | 16x25 | 0.059 | 2.24 |
| 820 | 821 | 12.5x35 | 0.019 | 2.96 | 16x31.5 | 0.054 | 2.72 |
| | | 16x20 | 0.023 | 2.73 | | | |
| 1000 | 102 | 16x25 | 0.021 | 3.01 | 16x35.5 | 0.048 | 3.17 |