

RADIAL TYPE

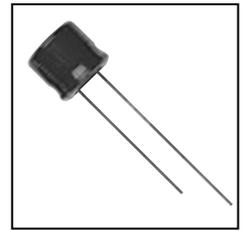
SL

Series

7mmL 105°C, Low Impedance

JAMICON®

- High ripple current, low impedance series with 7mm height.

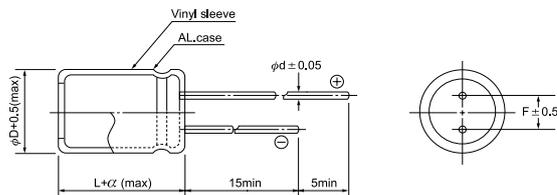


SPECIFICATION

| 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 3 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 | |
| | $\tan \delta$ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | | | |
| | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | -25°C / +20°C | 3 | 3 | 3 | 2 | 2 | 2 | |
| | -55°C / +20°C | 6 | 6 | 6 | 4 | 4 | 4 | |
| 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 | $\leq \pm 20\%$ of initial value | | | | | | |
| | 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) | | | | | | | |

DIMENSIONS (mm)

| ϕD | 4 | 5 | 6.3 | 8 |
|----------|------|------|------|------|
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| d | 0.45 | 0.45 | 0.45 | 0.50 |
| α | 1.0 | 1.0 | 1.0 | 1.0 |



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 |
| 50V | 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 100kHz
 Max ripple current : mA(rms) 105°C 100kHz

| V(Code) | | 6.3 (0J) | | | | 10 (1A) | | | | |
|---------|------|----------|-------|-------|-------|---------|-------|-------|-------|------|
| μF | Code | Item | DxL | IMP. | | R.C. | DxL | IMP. | | R.C. |
| | | | | 20°C | -10°C | | | 20°C | -10°C | |
| 15 | 150 | | | | | → | 4x7 | 1.592 | 4.775 | 80 |
| 22 | 220 | | 4x7 | 1.191 | 3.572 | 80 | 4x7 | 1.184 | 3.552 | 95 |
| 27 | 270 | | 4x7 | 1.051 | 3.153 | 90 | 4x7 | 1.045 | 3.135 | 100 |
| 33 | 330 | | 4x7 | 0.926 | 2.778 | 100 | 4x7 | 0.921 | 2.763 | 110 |
| 39 | 390 | | 4x7 | 0.839 | 2.518 | 110 | 5x7 | 0.835 | 2.505 | 140 |
| 47 | 470 | | 5x7 | 0.629 | 1.886 | 130 | 5x7 | 0.568 | 1.705 | 160 |
| 56 | 560 | | 5x7 | 0.561 | 1.682 | 150 | 5x7 | 0.507 | 1.521 | 170 |
| 68 | 680 | | 5x7 | 0.489 | 1.467 | 160 | 6.3x7 | 0.442 | 1.326 | 210 |
| 82 | 820 | | 6.3x7 | 0.450 | 1.351 | 200 | 6.3x7 | 0.407 | 1.222 | 230 |
| 100 | 101 | | 6.3x7 | 0.406 | 1.219 | 220 | 6.3x7 | 0.367 | 1.102 | 260 |
| 120 | 121 | | 6.3x7 | 0.346 | 1.039 | 250 | 6.3x7 | 0.313 | 0.939 | 280 |
| 150 | 151 | | 6.3x7 | 0.283 | 0.850 | 280 | 8x7 | 0.256 | 0.768 | 370 |
| 180 | 181 | | 8x7 | 0.246 | 0.739 | 350 | | | | |
| 220 | 221 | | 8x7 | 0.210 | 0.630 | 390 | | | | |

| V(Code) | | 16 (1C) | | | | 25 (1E) | | | | |
|---------|------|---------|-------|-------|-------|---------|-------|-------|-------|------|
| μF | Code | Item | DxL | IMP. | | R.C. | DxL | IMP. | | R.C. |
| | | | | 20°C | -10°C | | | 20°C | -10°C | |
| 10 | 100 | | 4x7 | 1.416 | 4.249 | 75 | 4x7 | 1.332 | 3.995 | 95 |
| 15 | 150 | | 4x7 | 1.039 | 3.116 | 90 | 4x7 | 0.977 | 2.930 | 110 |
| 18 | 180 | | 4x7 | 0.897 | 2.692 | 100 | 5x7 | 0.851 | 2.552 | 140 |
| 22 | 220 | | 4x7 | 0.772 | 2.317 | 100 | 5x7 | 0.726 | 2.179 | 150 |
| 27 | 270 | | 5x7 | 0.682 | 2.046 | 130 | 6.3x7 | 0.641 | 1.923 | 190 |
| 33 | 330 | | 5x7 | 0.601 | 1.802 | 140 | 6.3x7 | 0.565 | 1.695 | 210 |
| 39 | 390 | | 6.3x7 | 0.545 | 1.634 | 180 | 6.3x7 | 0.512 | 1.537 | 220 |
| 47 | 470 | | 6.3x7 | 0.482 | 1.446 | 190 | 6.3x7 | 0.453 | 1.360 | 250 |
| 56 | 560 | | 6.3x7 | 0.430 | 1.290 | 210 | 8x7 | 0.404 | 1.213 | 310 |
| 68 | 680 | | 6.3x7 | 0.375 | 1.125 | 230 | 8x7 | 0.352 | 1.057 | 340 |
| 82 | 820 | | 6.3x7 | 0.345 | 1.036 | 260 | | | | |
| 100 | 101 | | 6.3x7 | 0.312 | 0.935 | 280 | | | | |

| V(Code) | | 35 (1V) | | | | 50 (1H) | | | | |
|---------|------|---------|-------|-------|-------|---------|-------|-------|-------|------|
| μF | Code | Item | DxL | IMP. | | R.C. | DxL | IMP. | | R.C. |
| | | | | 20°C | -10°C | | | 20°C | -10°C | |
| 4.7 | 4R7 | | 4x7 | 2.760 | 8.280 | 70 | 4x7 | 2.758 | 8.274 | 90 |
| 6.8 | 6R8 | | 4x7 | 2.385 | 7.154 | 80 | 5x7 | 2.383 | 7.149 | 110 |
| 10 | 100 | | 5x7 | 0.998 | 2.994 | 110 | 6.3x7 | 0.499 | 1.496 | 150 |
| 15 | 150 | | 5x7 | 0.732 | 2.195 | 140 | 6.3x7 | 0.366 | 1.097 | 180 |
| 18 | 180 | | 6.3x7 | 0.638 | 1.913 | 170 | 6.3x7 | 0.319 | 0.956 | 200 |
| 22 | 220 | | 6.3x7 | 0.544 | 1.633 | 180 | 8x7 | 0.272 | 0.816 | 240 |
| 27 | 270 | | 6.3x7 | 0.480 | 1.441 | 200 | 8x7 | 0.240 | 0.720 | 270 |
| 33 | 330 | | 8x7 | 0.423 | 1.270 | 250 | 8x7 | 0.212 | 0.635 | 290 |
| 39 | 390 | | 8x7 | 0.384 | 1.151 | 270 | | | | |
| 47 | 470 | | 8x7 | 0.340 | 1.019 | 300 | | | | |

All blank voltage on sleeve marking is the same voltage as" → "point to.