

LARGE CAN TYPE

KP

Series

Screw Terminal Type

JAMICON®

- High ripple current characteristic.
- Long life for 2000 hours at 85°C.



SPECIFICATION

| Item | Characteristic | | | | | | | | | | | | | | | | |
|--|---|-----------------------------------|------|------|------|------|------|------|--------------|---------|------|------|------|------|------|------|------|
| Operation Temperature Range | -40 ~ +85°C | | | | | | | | -25 ~ +85°C | | | | | | | | |
| Rated Working Voltage | 6.3 ~ 100VDC | | | | | | | | 160 ~ 450VDC | | | | | | | | |
| Capacitance Tolerance (120Hz 20°C) | ±20%(M) | | | | | | | | | | | | | | | | |
| Leakage Current (20°C) | I ≤ 0.02CV or 5 (mA) *Whichever is smaller after 5 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 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | |
| | S.V. | 8 | 13 | 20 | 32 | 44 | 63 | 79 | 100 | 125 | 200 | 250 | 300 | 400 | 450 | 500 | |
| Dissipation Factor (tan δ) (120Hz 20°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 | |
| | tan δ | φ35 | 0.75 | 0.75 | 0.60 | 0.40 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.15 | 0.15 | 0.15 | 0.20 | 0.20 | 0.20 |
| | | φ51 | 1.00 | 1.00 | 0.70 | 0.50 | 0.50 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.15 | 0.15 | 0.20 | 0.20 | 0.20 |
| | | φ64 | 1.30 | 1.30 | 0.80 | 0.70 | 0.60 | 0.50 | 0.30 | 0.25 | 0.25 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 |
| | | φ77 | 1.50 | 1.50 | 1.00 | 0.80 | 0.70 | 0.60 | 0.40 | 0.30 | 0.25 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 |
| | φ90 | 1.50 | 1.50 | 1.00 | 0.80 | 0.70 | 0.60 | 0.40 | 0.30 | 0.25 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 | |
| Low Temperature Stability | Impedance ratio at 120Hz | | | | | | | | | | | | | | | | |
| | Rated Voltage (V) | 10~100 | | | | | | | | 160~450 | | | | | | | |
| | -25°C / +20°C | | | | | | | | | 8 | | | | | | | |
| | -40°C / +20°C | | | | | | | | | | | | | | | | |
| | 12 | | | | | | | | | | | | | | | | |
| Load Life | After 2000 hours application of W.V. and +85°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rate working voltage) | | | | | | | | | | | | | | | | |
| | Capacitance Change | ≤ ± 15% of initial value | | | | | | | | | | | | | | | |
| | Dissipation Factor | ≤ 175% of initial specified value | | | | | | | | | | | | | | | |
| | Leakage current | ≤ initial specified value | | | | | | | | | | | | | | | |
| Shelf Life | At +85°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment) | | | | | | | | | | | | | | | | |

TERMINAL TYPE

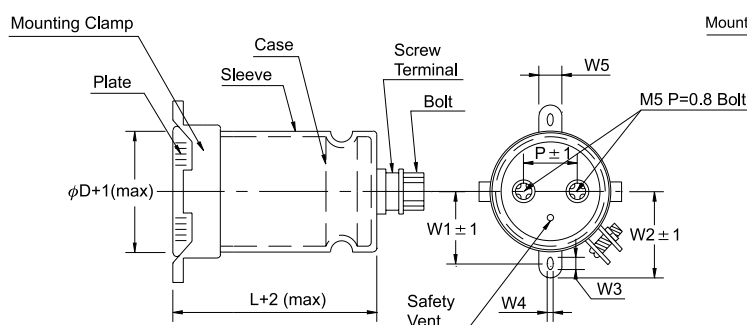
| φD | W1 | W2 | W3 | W4 | W5 | P |
|----|------|------|-----|-----|------|------|
| 35 | 24.0 | 30.0 | 7.0 | 3.5 | 10.0 | 12.7 |
| 51 | 32.5 | 37.5 | 4.5 | 7.0 | 13.0 | 21.8 |
| 64 | 38.5 | 42.8 | 4.5 | 7.0 | 13.0 | 28.2 |
| 77 | 44.8 | 49.0 | 4.5 | 7.0 | 13.0 | 31.4 |
| 90 | 52.3 | 58.8 | 5.0 | 8.0 | 16.0 | 31.4 |

RIPPLE CURRENT COEFFICIENTS

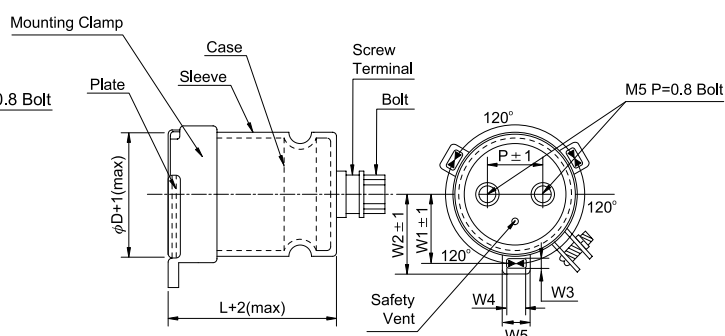
| Frequency(Hz) | 60 | 120 | 1k | 10k | 100k |
|---------------|------------|------|------|------|------|
| W.V. | Multiplier | | | | |
| 6.3 ~ 35V | 0.90 | 1.00 | 1.05 | 1.10 | 1.10 |
| 50 ~ 100V | 0.90 | 1.00 | 1.10 | 1.15 | 1.15 |
| 160 ~ 450V | 0.80 | 1.00 | 1.20 | 1.40 | 1.40 |

| Temperature(°C) | ≤60 | 70 | 85 |
|-----------------|------|------|------|
| Multiplier | 1.80 | 1.60 | 1.00 |

(▲ φ35)



(▲ φ51, φ64, φ77, φ90)



KP

 Series

JAMICON®

● CASE SIZE & MAX RIPPLE CURRENT

 Case size : D x L (mm)
 Max ripple current : A(rms) 85°C 120Hz

| μF | V(Code) | | 6.3 (0J) | | 10 (1A) | | 16 (1C) | |
|--------|---------|------|----------|-------|---------|-------|---------|-------|
| | Code | Item | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 22000 | 223 | | | | | | 35x50 | 4.16 |
| 33000 | 333 | | | | 35x50 | 4.14 | 35x60 | 5.51 |
| 39000 | 393 | | | | 35x50 | 4.50 | 35x80 | 6.80 |
| 47000 | 473 | | 35x50 | 4.94 | 35x60 | 5.35 | 35x80 | 7.47 |
| 56000 | 563 | | 35x60 | 4.96 | 35x80 | 6.63 | 35x100 | 9.03 |
| 68000 | 683 | | 35x60 | 5.47 | 35x80 | 7.31 | 35x121 | 9.88 |
| 82000 | 823 | | 35x80 | 6.82 | 35x80 | 8.02 | 35x121 | 10.85 |
| 100000 | 104 | | 35x80 | 7.53 | 35x121 | 9.21 | 51x80 | 10.86 |
| 120000 | 124 | | 35x121 | 9.15 | 51x80 | 9.23 | 51x90 | 11.74 |
| 150000 | 154 | | 51x80 | 9.51 | 51x80 | 10.32 | 51x121 | 12.48 |
| 180000 | 184 | | 51x80 | 10.42 | 51x90 | 11.50 | 51x121 | 13.67 |
| 220000 | 224 | | 51x100 | 12.39 | 51x121 | 13.66 | 64x100 | 14.75 |
| 270000 | 274 | | 64x100 | 13.68 | 51x121 | 15.13 | 64x115 | 17.37 |
| 330000 | 334 | | 64x100 | 15.12 | 64x121 | 17.25 | 77x121 | 18.19 |
| 390000 | 394 | | 64x121 | 16.97 | 64x121 | 18.75 | 77x121 | 19.78 |
| 470000 | 474 | | 64x121 | 18.63 | 77x121 | 19.25 | | |
| 560000 | 564 | | 77x121 | 18.80 | 77x121 | 21.01 | | |
| 680000 | 684 | | 77x121 | 20.71 | | | | |

| μF | V(Code) | | 25 (1E) | | 35 (1V) | | 50 (1H) | |
|--------|---------|------|---------|-------|---------|-------|---------|-------|
| | Code | Item | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 6800 | 682 | | | | | | 35x50 | 3.26 |
| 8200 | 822 | | | | | | 35x50 | 3.58 |
| 10000 | 103 | | | | 35x50 | 3.53 | 35x60 | 4.27 |
| 12000 | 123 | | | | 35x50 | 3.87 | 35x60 | 4.68 |
| 15000 | 153 | | | | 35x60 | 3.96 | 35x80 | 5.94 |
| 18000 | 183 | | 35x50 | 3.35 | 35x60 | 4.34 | 35x80 | 6.51 |
| 22000 | 223 | | 35x60 | 4.01 | 35x80 | 4.93 | 35x121 | 6.70 |
| 27000 | 273 | | 35x80 | 5.04 | 35x80 | 5.46 | 35x121 | 7.42 |
| 33000 | 333 | | 35x80 | 5.58 | 35x121 | 7.20 | 51x80 | 7.55 |
| 39000 | 393 | | 35x80 | 6.06 | 35x121 | 7.83 | 51x80 | 8.20 |
| 47000 | 473 | | 35x121 | 7.54 | 51x80 | 8.26 | 51x100 | 9.80 |
| 56000 | 563 | | 35x121 | 8.23 | 51x80 | 9.02 | 51x100 | 10.70 |
| 68000 | 683 | | 51x100 | 9.13 | 51x100 | 10.35 | 64x100 | 11.34 |
| 82000 | 823 | | 51x100 | 10.03 | 51x100 | 11.36 | 64x100 | 12.46 |
| 100000 | 104 | | 51x121 | 11.26 | 64x100 | 11.48 | 64x144 | 12.81 |
| 120000 | 124 | | 51x121 | 12.33 | 64x121 | 13.13 | 64x144 | 14.03 |
| 150000 | 154 | | 64x100 | 12.68 | 64x144 | 15.42 | 77x144 | 15.86 |
| 180000 | 184 | | 64x100 | 13.89 | 64x144 | 16.89 | | |
| 220000 | 224 | | 64x144 | 16.05 | 77x144 | 17.79 | | |
| 270000 | 274 | | 77x115 | 17.80 | | | | |
| 330000 | 334 | | 77x144 | 20.38 | | | | |

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : A(rms) 85°C 120Hz

| μF | V(Code) | | 63 (1J) | | 80 (1K) | | 100 (2A) | |
|--------|---------|------|---------|-------|---------|-------|----------|-------|
| | Code | Item | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 2200 | 222 | | | | | | 35x50 | 2.15 |
| 2700 | 272 | | | | | | 35x50 | 2.38 |
| 3300 | 332 | | | | | | 35x50 | 2.64 |
| 3900 | 392 | | | | | | 35x60 | 3.10 |
| 4700 | 472 | | | | 35x50 | 2.72 | 35x80 | 3.87 |
| 5600 | 562 | | 35x50 | 2.97 | 35x60 | 3.22 | 35x80 | 4.22 |
| 6800 | 682 | | 35x50 | 3.28 | 35x80 | 4.03 | 35x100 | 5.15 |
| 8200 | 822 | | 35x60 | 3.89 | 35x80 | 4.42 | 35x121 | 5.83 |
| 10000 | 103 | | 35x80 | 4.77 | 35x100 | 5.41 | 51x80 | 6.03 |
| 12000 | 123 | | 35x80 | 5.23 | 35x121 | 6.47 | 51x80 | 6.60 |
| 15000 | 153 | | 35x100 | 5.88 | 51x80 | 7.63 | 51x121 | 8.86 |
| 18000 | 183 | | 35x121 | 6.16 | 51x80 | 8.35 | 51x121 | 9.71 |
| 22000 | 223 | | 51x80 | 7.73 | 51x100 | 8.76 | 64x100 | 9.79 |
| 27000 | 273 | | 51x80 | 8.56 | 51x100 | 9.70 | 64x100 | 10.85 |
| 33000 | 333 | | 51x100 | 8.76 | 64x100 | 10.22 | 64x144 | 12.80 |
| 39000 | 393 | | 51x121 | 10.22 | 64x100 | 11.11 | 77x115 | 13.11 |
| 47000 | 473 | | 64x100 | 11.88 | 64x144 | 14.33 | 77x144 | 14.81 |
| 56000 | 563 | | 64x100 | 12.96 | 64x144 | 15.64 | | |
| 68000 | 683 | | 64x144 | 13.63 | 77x144 | 16.27 | | |
| 100000 | 104 | | 77x144 | 15.86 | | | | |

| μF | V(Code) | | 160 (2C) | | 200 (2D) | | 250 (2E) | |
|-------|---------|------|----------|-------|----------|-------|----------|-------|
| | Code | Item | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 470 | 471 | | | | | | 35x50 | 1.66 |
| 560 | 561 | | | | | | 35x50 | 1.81 |
| 680 | 681 | | | | 35x50 | 1.99 | 35x50 | 1.99 |
| 820 | 821 | | | | 35x50 | 2.19 | 35x60 | 2.37 |
| 1000 | 102 | | | | 35x60 | 2.62 | 35x80 | 2.87 |
| 1200 | 122 | | 35x50 | 2.64 | 35x60 | 2.87 | 35x80 | 3.15 |
| 1500 | 152 | | 35x60 | 3.20 | 35x80 | 3.52 | 35x100 | 3.49 |
| 1800 | 182 | | 35x70 | 3.63 | 35x80 | 3.85 | 35x100 | 3.83 |
| 2200 | 222 | | 35x80 | 4.26 | 35x100 | 4.23 | 51x70 | 4.28 |
| 2700 | 272 | | 35x100 | 4.68 | 35x121 | 4.72 | 51x70 | 4.74 |
| 3300 | 332 | | 35x121 | 5.22 | 51x70 | 5.24 | 51x90 | 5.38 |
| 3900 | 392 | | 51x70 | 5.70 | 51x70 | 5.70 | 51x115 | 6.23 |
| 4700 | 472 | | 51x70 | 6.26 | 51x90 | 6.42 | 64x96 | 7.06 |
| 5600 | 562 | | 51x90 | 7.00 | 51x115 | 7.47 | 64x96 | 7.71 |
| 6800 | 682 | | 51x90 | 7.72 | 51x130 | 8.70 | 64x115 | 9.19 |
| 8200 | 822 | | 51x115 | 9.04 | 64x96 | 9.33 | 64x115 | 10.09 |
| 10000 | 103 | | 64x96 | 10.30 | 64x96 | 10.30 | 64x130 | 11.76 |
| 12000 | 123 | | 64x96 | 11.29 | 77x96 | 12.56 | 77x115 | 13.01 |
| 15000 | 153 | | 64x130 | 13.83 | 77x96 | 14.04 | 77x130 | 14.70 |
| 18000 | 183 | | 64x130 | 15.15 | 77x130 | 16.80 | 77x155 | 17.40 |
| 22000 | 223 | | 77x130 | 18.57 | 77x155 | 20.07 | 90x157 | 20.19 |
| 27000 | 273 | | 77x130 | 20.58 | 90x131 | 21.62 | | |
| 33000 | 333 | | 90x131 | 23.90 | 90x157 | 25.85 | | |
| 39000 | 393 | | 90x157 | 28.10 | | | | |

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : A(rms) 85°C 120Hz

| μF | V(Code) | | 350 (2V) | | 400 (2G) | | 450 (2W) | |
|-------|---------|------|----------|-------|----------|-------|----------|-------|
| | Code | Item | DxL | R.C. | DxL | R.C. | DxL | R.C. |
| 270 | 271 | | | | | | 35x50 | 1.45 |
| 330 | 331 | | | | 35x80 | 1.97 | 35x80 | 1.97 |
| 390 | 391 | | 35x50 | 1.74 | 35x80 | 2.14 | 35x80 | 2.14 |
| 470 | 471 | | 35x80 | 2.35 | 35x80 | 2.35 | 35x80 | 2.35 |
| 560 | 561 | | 35x80 | 2.57 | 35x80 | 2.57 | 35x100 | 2.63 |
| 680 | 681 | | 35x80 | 2.83 | 35x100 | 2.90 | 35x100 | 2.90 |
| 820 | 821 | | 35x100 | 3.18 | 35x100 | 3.18 | 51x70 | 3.26 |
| 1000 | 102 | | 35x100 | 3.51 | 51x70 | 3.60 | 51x70 | 3.60 |
| 1200 | 122 | | 51x70 | 3.94 | 51x70 | 3.94 | 51x90 | 4.39 |
| 1500 | 152 | | 51x70 | 4.41 | 51x90 | 4.91 | 51x115 | 5.17 |
| 1800 | 182 | | 51x90 | 5.38 | 51x90 | 5.38 | 51x130 | 5.64 |
| 2200 | 222 | | 51x90 | 5.95 | 51x130 | 6.23 | 64x96 | 6.40 |
| 2700 | 272 | | 51x130 | 6.91 | 64x96 | 7.09 | 64x115 | 7.25 |
| 3300 | 332 | | 51x130 | 7.63 | 64x115 | 8.01 | 64x130 | 8.22 |
| 3900 | 392 | | 64x115 | 8.71 | 64x130 | 8.94 | 77x115 | 9.40 |
| 4700 | 472 | | 64x130 | 9.81 | 77x115 | 10.32 | 77x130 | 10.88 |
| 5600 | 562 | | 77x115 | 11.26 | 77x130 | 11.87 | 77x155 | 12.83 |
| 6800 | 682 | | 77x130 | 13.08 | 77x155 | 14.14 | 90x157 | 14.60 |
| 8200 | 822 | | 77x155 | 15.53 | 90x157 | 16.03 | 90x157 | 16.03 |
| 10000 | 103 | | 90x157 | 17.71 | 90x157 | 17.71 | 90x196 | 19.53 |
| 12000 | 123 | | 90x157 | 19.40 | 90x196 | 21.40 | 90x236 | 23.28 |
| 15000 | 153 | | 90x196 | 23.93 | 90x236 | 26.02 | | |
| 18000 | 183 | | 90x236 | 28.51 | | | | |