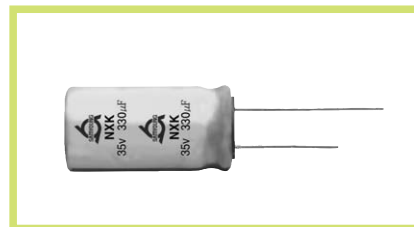
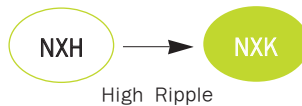


NXK Series

- 105°C 4,000~5,000Hrs assured

- Non-solvent proof.
- Low impedance.
- High Ripple.
- For LCD TV BLU Inverter, SMPS, IP-Board, Adaptor
- RoHS compliant.
- Halogen-free capacitors are also available.



SPECIFICATIONS

| Item | Characteristics | | | | | | | | | | | | | | | | | | | |
|--|--|---------------------------------|---------------|---------------------|--------------------|-----------------------------|-----------------------------|-----------------------------|--|------|-----------------|-------------------------------|--|--|------------|-----------------|-------------------------------|--|------|----------|
| Rated Voltage Range | 10 ~ 50 V _{DC} | | | | | | | | | | | | | | | | | | | |
| Operating Temperature Range | -40 ~ + 105°C | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | | | | | | | | | | |
| Leakage Current | I = 0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V _{DC}) (at 20°C, 2 minutes) | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (Tanδ) | <table border="1"> <tr> <th>Rated Voltage(V_{DC})</th> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <th>Tanδ(Max.)</th> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)</p> | Rated Voltage(V _{DC}) | 10 | 16 | 25 | 35 | 50 | Tanδ(Max.) | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | | | | | | | |
| Rated Voltage(V _{DC}) | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | |
| Tanδ(Max.) | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | | | | | | | | | | | | | | | |
| Temperature Characteristics (Max. Impedance ratio) | <table border="1"> <tr> <td>Z(-25°C) / Z(+20°C)</td> <td>2</td> </tr> <tr> <td>Z(-40°C) / Z(+20°C)</td> <td>3</td> </tr> </table> <p>(at 120Hz)</p> | Z(-25°C) / Z(+20°C) | 2 | Z(-40°C) / Z(+20°C) | 3 | | | | | | | | | | | | | | | |
| Z(-25°C) / Z(+20°C) | 2 | | | | | | | | | | | | | | | | | | | |
| Z(-40°C) / Z(+20°C) | 3 | | | | | | | | | | | | | | | | | | | |
| Load Life | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied for the specified period of time at 105°C.</p> <table border="1"> <tr> <td>Rated voltage(V_{DC})</td> <td>10</td> <td>16~50</td> <td>Case Size(∅D)</td> <td>Life Time</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±25% of the initial value</td> <td>∅ 8</td> <td rowspan="2">4,000Hrs</td> </tr> <tr> <td>Tanδ</td> <td colspan="2">≤ ±200% of the initial specified value</td> <td>∅ 10x12.5L</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ The initial specified value</td> <td>∅ 10</td> <td>5,000Hrs</td> </tr> </table> | Rated voltage(V _{DC}) | 10 | 16~50 | Case Size(∅D) | Life Time | Capacitance change | ≤ ±30% of the initial value | ≤ ±25% of the initial value | ∅ 8 | 4,000Hrs | Tanδ | ≤ ±200% of the initial specified value | | ∅ 10x12.5L | Leakage current | ≤ The initial specified value | | ∅ 10 | 5,000Hrs |
| Rated voltage(V _{DC}) | 10 | 16~50 | Case Size(∅D) | Life Time | | | | | | | | | | | | | | | | |
| Capacitance change | ≤ ±30% of the initial value | ≤ ±25% of the initial value | ∅ 8 | 4,000Hrs | | | | | | | | | | | | | | | | |
| Tanδ | ≤ ±200% of the initial specified value | | ∅ 10x12.5L | | | | | | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value | | ∅ 10 | 5,000Hrs | | | | | | | | | | | | | | | | |
| Shelf Life | <p>The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.</p> <table border="1"> <tr> <td>Rated voltage(V_{DC})</td> <td>10</td> <td>16~50</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±25% of the initial value</td> </tr> <tr> <td>Tanδ</td> <td colspan="2">≤ ±200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ The initial specified value</td> </tr> </table> | Rated voltage(V _{DC}) | 10 | 16~50 | Capacitance change | ≤ ±30% of the initial value | ≤ ±25% of the initial value | Tanδ | ≤ ±200% of the initial specified value | | Leakage current | ≤ The initial specified value | | | | | | | | |
| Rated voltage(V _{DC}) | 10 | 16~50 | | | | | | | | | | | | | | | | | | |
| Capacitance change | ≤ ±30% of the initial value | ≤ ±25% of the initial value | | | | | | | | | | | | | | | | | | |
| Tanδ | ≤ ±200% of the initial specified value | | | | | | | | | | | | | | | | | | | |
| Leakage current | ≤ The initial specified value | | | | | | | | | | | | | | | | | | | |
| Others | Satisfied characteristics KS C IEC 60384-4 | | | | | | | | | | | | | | | | | | | |

DIMENSIONS OF NXK Series

Unit(mm)

Marking : YELLOW SLEEVE, BLACK INK

| | | |
|-----|---------------------------|-----|
| ∅D | 8 | 10 |
| ∅d | 0.6 | 0.6 |
| F | 3.5 | 5.0 |
| ∅D' | ∅D + 0.5 max. | |
| L' | L + 1.5 max. L + 2.0 max. | |



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RATINGS OF NXK series

| V _{dc} | 10 | | |
|------------------|--------------|--|----------------------------|
| Capacitance (μF) | ø D × L (mm) | Rated Ripple Current (mArms/105°C, 100kHz) | IMP. (Ω max./20°C, 100kHz) |
| 680 | 8 × 11.5 | 1,417 | 0.073 |
| 1,000 | 8 × 15 | 2,050 | 0.059 |
| 1,000 | 10 × 12.5 | 2,190 | 0.053 |
| 1,500 | 8 × 20 | 2,380 | 0.041 |
| 1,500 | 10 × 16 | 2,550 | 0.038 |
| 1,800 | 10 × 20 | 2,880 | 0.028 |
| 2,200 | 10 × 25 | 3,160 | 0.024 |
| 2,700 | 10 × 33 | 3,570 | 0.020 |

| V _{dc} | 16 | | |
|------------------|--------------|--|----------------------------|
| Capacitance (μF) | ø D × L (mm) | Rated Ripple Current (mArms/105°C, 100kHz) | IMP. (Ω max./20°C, 100kHz) |
| 470 | 8 × 11.5 | 1,417 | 0.073 |
| 680 | 8 × 15 | 2,050 | 0.059 |
| 680 | 10 × 12.5 | 2,190 | 0.053 |
| 1,000 | 8 × 20 | 2,380 | 0.041 |
| 1,000 | 10 × 16 | 2,550 | 0.038 |
| 1,500 | 10 × 20 | 2,880 | 0.028 |
| 1,800 | 10 × 25 | 3,160 | 0.024 |
| 2,200 | 10 × 33 | 3,570 | 0.020 |

| V _{dc} | 25 | | |
|------------------|--------------|--|----------------------------|
| Capacitance (μF) | ø D × L (mm) | Rated Ripple Current (mArms/105°C, 100kHz) | IMP. (Ω max./20°C, 100kHz) |
| 330 | 8 × 11.5 | 1,417 | 0.073 |
| 390 | 8 × 15 | 2,050 | 0.059 |
| 470 | 10 × 12.5 | 2,190 | 0.053 |
| 560 | 8 × 20 | 2,380 | 0.041 |
| 680 | 10 × 16 | 2,550 | 0.038 |
| 820 | 10 × 20 | 2,880 | 0.028 |
| 1,000 | 10 × 25 | 3,160 | 0.024 |
| 1,200 | 10 × 33 | 3,570 | 0.020 |

| V _{dc} | 35 | | |
|------------------|--------------|--|----------------------------|
| Capacitance (μF) | ø D × L (mm) | Rated Ripple Current (mArms/105°C, 100kHz) | IMP. (Ω max./20°C, 100kHz) |
| 220 | 8 × 11.5 | 1,417 | 0.073 |
| 270 | 8 × 15 | 2,050 | 0.059 |
| 330 | 10 × 12.5 | 2,190 | 0.053 |
| 390 | 8 × 20 | 2,380 | 0.041 |
| 470 | 10 × 16 | 2,550 | 0.038 |
| 560 | 10 × 20 | 2,880 | 0.028 |
| 680 | 10 × 25 | 3,160 | 0.024 |
| 1,000 | 10 × 33 | 3,570 | 0.020 |

| V _{dc} | 50 | | |
|------------------|--------------|--|----------------------------|
| Capacitance (μF) | ø D × L (mm) | Rated Ripple Current (mArms/105°C, 100kHz) | IMP. (Ω max./20°C, 100kHz) |
| 100 | 8 × 11.5 | 1,086 | 0.096 |
| 120 | 8 × 15 | 1,558 | 0.080 |
| 150 | 10 × 12.5 | 1,612 | 0.083 |
| 180 | 8 × 20 | 1,888 | 0.065 |
| 220 | 10 × 16 | 1,985 | 0.057 |
| 270 | 10 × 20 | 2,322 | 0.042 |
| 330 | 10 × 25 | 2,626 | 0.037 |
| 470 | 10 × 33 | 2,954 | 0.033 |

RIPPLE CURRENT MULTIPLIERS

Friquency Multiplires

| Cap.(μF) | Freq.(Hz) | 120 | 1k | 10k | 100k |
|---------------|-----------|------|------|------|------|
| 100 ~ 270 | | 0.50 | 0.73 | 0.92 | 1.00 |
| 330 ~ 680 | | 0.55 | 0.77 | 0.94 | 1.00 |
| 820 ~ 1,800 | | 0.60 | 0.80 | 0.96 | 1.00 |
| 2,200 ~ 2,700 | | 0.70 | 0.85 | 0.98 | 1.00 |