

NSKV SERIES
105°C Bi-polar, Lead Free Reflow Soldering.
◆ FEATURES

- Lead Free reflow soldering is available.
- Available for high density mounting.


◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|--|--------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|----|------------------|------|------|------|------|------|------|------------------|---|---|---|---|---|---|
| Category Temperature Range | -55~+105°C | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3~50V.DC | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20%(20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | I=0.05CV or 10μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V) | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.35</td> <td>0.26</td> <td>0.24</td> <td>0.22</td> <td>0.20</td> <td>0.18</td> </tr> </tbody> </table> (20°C,120Hz) | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | tan δ | 0.35 | 0.26 | 0.24 | 0.22 | 0.20 | 0.18 | | | | | | | |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| tan δ | 0.35 | 0.26 | 0.24 | 0.22 | 0.20 | 0.18 | | | | | | | | | | | | | | | | |
| Endurance | After applying rated voltage with rated ripple current for 1000hrs at 105°C, (The polarity shall be reversed every 250hrs.), the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table> | Capacitance Change | Within ±25% of the initial value. | Dissipation Factor | Not more than 200% of the specified value. | Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | |
| Capacitance Change | Within ±25% of the initial value. | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value. | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table> (120Hz) | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | Z(-40°C)/Z(20°C) | 8 | 8 | 4 | 4 | 3 | 3 |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 8 | 8 | 4 | 4 | 3 | 3 | | | | | | | | | | | | | | | | |

◆ MULTIPLIER FOR RIPPLE CURRENT

(1)Frequency coefficient

| Frequency (Hz) | 60(50) | 120 | 500 | 1k | 10k≤ |
|----------------|--------|------|------|------|------|
| 0.1~1μF | 0.50 | 1.00 | 1.20 | 1.30 | 1.50 |
| 2.2~4.7μF | 0.65 | 1.00 | 1.20 | 1.30 | 1.50 |
| 10~47μF | 0.80 | 1.00 | 1.20 | 1.30 | 1.50 |

(2)Temperature coefficient

| Ambient Temperature (°C) | 105 | 85 | 65≥ |
|--------------------------|-----|-----|-----|
| Coefficient | 1.0 | 1.7 | 2.1 |

◆ PART NUMBER

| | | | | | |
|---------------|--------|-------------------|-----------------------|--------|-----------|
| □□□ | NSKV | □□□□□ | □ | □□□ | D×L |
| Rated Voltage | Series | Rated Capacitance | Capacitance Tolerance | Option | Case Size |

