

## NW5 SERIES

Bi-polar, 5mm Height

## ◆ FEATURES

- RoHS compliance.

16V 1  
2.2 2  
N.P.43.0V 5  
0.47 6

## ◆ SPECIFICATIONS

| Items   | Characteristics  |      |      |      |      |      |      |                    |   |                    |  |                 |                                    |
|---|--|------|------|------|------|------|------|--------------------|---|--------------------|--|-----------------|------------------------------------|
| Category Temperature Range                        | -40~+85°C  |      |      |      |      |      |      |                    |   |                    |  |                 |                                    |
| Rated Voltage Range                               | 6.3~50V.DC   |      |      |      |      |      |      |                    |   |                    |  |                 |                                    |
| Capacitance Tolerance                             | $\pm 20\%$ (20°C, 120Hz)   |      |      |      |      |      |      |                    |   |                    |  |                 |                                    |
| Leakage Current(MAX)                              | I=0.05CV or $10 \mu A$ whichever is greater.<br>(After 5 minutes application of rated voltage)<br><br>I=Leakage Current( $\mu A$ )      C=Rated Capacitance( $\mu F$ )      V=Rated Voltage(V)   |      |      |      |      |      |      |                    |   |                    |  |                 |                                    |
| Dissipation Factor(MAX)<br>(tan $\delta$ )        | Rated Voltage<br>(V)   | 6.3  | 10   | 16   | 25   | 35   | 50   |                    |   |                    |  |                 |                                    |
|   | tan $\delta$   | 0.26 | 0.22 | 0.20 | 0.20 | 0.20 | 0.20 |                    |   |                    |  |                 |                                    |
| Endurance   | After applying rated voltage with rated ripple current for 1000hrs at 85°C, (The polarity shall be reversed every 500hrs.), the capacitors shall meet the following requirements.<br><br><table border="1"> <tr> <td>Capacitance Change</td> <td>Within <math>\pm 25\%</math> 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> </table> |      |      |      |      |      |      | Capacitance Change | Within $\pm 25\%$ 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 $\pm 25\%$ 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<br>Impedance Ratio(MAX) | Rated Voltage<br>(V)   | 6.3  | 10   | 16   | 25   | 35   | 50   |                    |   |                    |  |                 |                                    |
|   | Z(-25°C)/Z(20°C)   | 6    | 4    | 4    | 3    | 2    | 2    |                    |   |                    |  |                 |                                    |
|   | Z(-40°C)/Z(20°C)   | 12   | 10   | 8    | 6    | 4    | 4    |                    |   |                    |  |                 |                                    |

## ◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

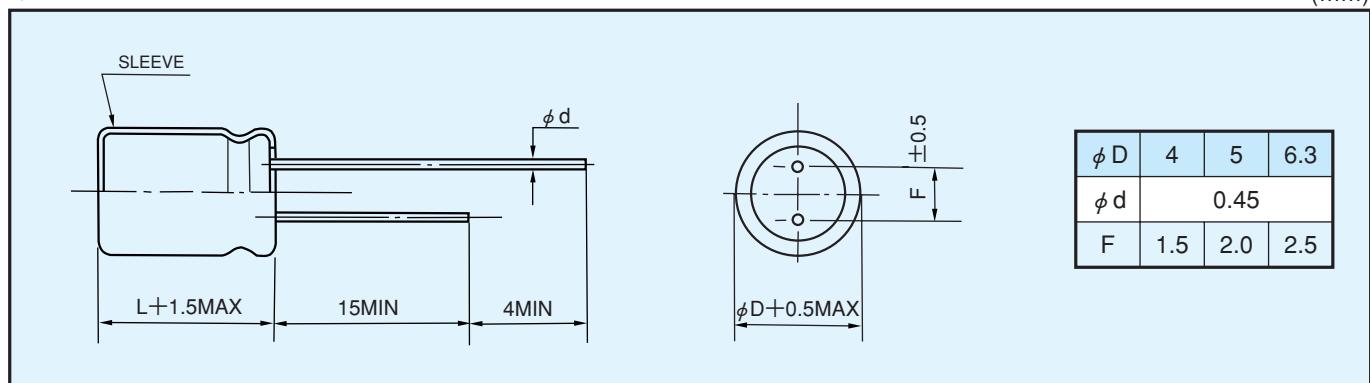
| Frequency<br>(Hz) | 60(50)          | 120  | 500  | 1k   | 10k $\leq$ |
|-------------------|-----------------|------|------|------|------------|
| Coefficient       | 0.1~1 $\mu F$   | 0.50 | 1.00 | 1.20 | 1.30       |
|                   | 2.2~4.7 $\mu F$ | 0.65 | 1.00 | 1.20 | 1.30       |
|                   | 10~47 $\mu F$   | 0.80 | 1.00 | 1.20 | 1.30       |

## ◆ PART NUMBER

□□□   NW5   □□□□□  
 Rated Voltage   Series   Rated Capacitance   Cap. Tolerance   Option   Lead Forming   D×L  
 Case Size

## DIMENSIONS

(mm)



◆ STANDARD SIZE, RATED RIPPLE CURRENT

Size  $\phi$  D×L(mm), Ripple Current (mA r.m.s./85°C, 120Hz)