

**VXW SERIES**

◆FEATURES

- Load Life : 105°C 10000 hours.
- Body diameter of  $\phi$  12.5mm to  $\phi$  18mm with high ripple current capability.
- Longer life than the current AXW series.
- RoHS compliance.



◆SPECIFICATIONS

| Items                               | Characteristics                                                                                                                                                                                                                                                                                                                                                                                     |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|---------|--------------------|-----------------------------------|--------------------|--------------------------------------------|-----------------|------------------------------------|--|--|
| Category Temperature Range          | -25~+105℃                                                                                                                                                                                                                                                                                                                                                                                           |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Rated Voltage Range                 | 200・400・420・450V.DC                                                                                                                                                                                                                                                                                                                                                                                 |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Capacitance Tolerance               | ±20%（20℃，120Hz）                                                                                                                                                                                                                                                                                                                                                                                     |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Leakage Current(MAX)                | I=3√CV（After 5 minutes application of rated voltage）<br>I=Leakage Current（μA）C=Rated Capacitance（μF）V=Rated Voltage(V)                                                                                                                                                                                                                                                                              |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Dissipation Factor(MAX)<br>(tan δ ) | <table><tr><td>Rated Voltage<br/>(V)</td><td>200</td><td>400</td><td>420~450</td></tr><tr><td>tan δ</td><td>0.15</td><td>0.15</td><td>0.20</td></tr></table>                                                                                                                                                                                                                                        | Rated Voltage<br>(V) | 200     | 400     | 420~450            | tan δ                             | 0.15               | 0.15                                       | 0.20            | (20℃，120Hz)                        |  |  |
| Rated Voltage<br>(V)                | 200                                                                                                                                                                                                                                                                                                                                                                                                 | 400                  | 420~450 |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| tan δ                               | 0.15                                                                                                                                                                                                                                                                                                                                                                                                | 0.15                 | 0.20    |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Endurance                           | After applying rated voltage with rated ripple current for 10000hrs at 105℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td>Within ±20% 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 ±20% 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 ±20% of the initial value.                                                                                                                                                                                                                                                                                                                                                                   |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Dissipation Factor                  | Not more than 200% of the specified value.                                                                                                                                                                                                                                                                                                                                                          |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Leakage Current                     | Not more than the specified value.                                                                                                                                                                                                                                                                                                                                                                  |                      |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Impedance Ratio(MAX)                | <table><tr><td>Rated Voltage<br/>(V)</td><td>200</td><td>400~450</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>3</td><td>8</td></tr></table>                                                                                                                                                                                                                                                              | Rated Voltage<br>(V) | 200     | 400~450 | Z(-25℃)/Z(20℃)     | 3                                 | 8                  | (120Hz)                                    |                 |                                    |  |  |
| Rated Voltage<br>(V)                | 200                                                                                                                                                                                                                                                                                                                                                                                                 | 400~450              |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |
| Z(-25℃)/Z(20℃)                      | 3                                                                                                                                                                                                                                                                                                                                                                                                   | 8                    |         |         |                    |                                   |                    |                                            |                 |                                    |  |  |

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

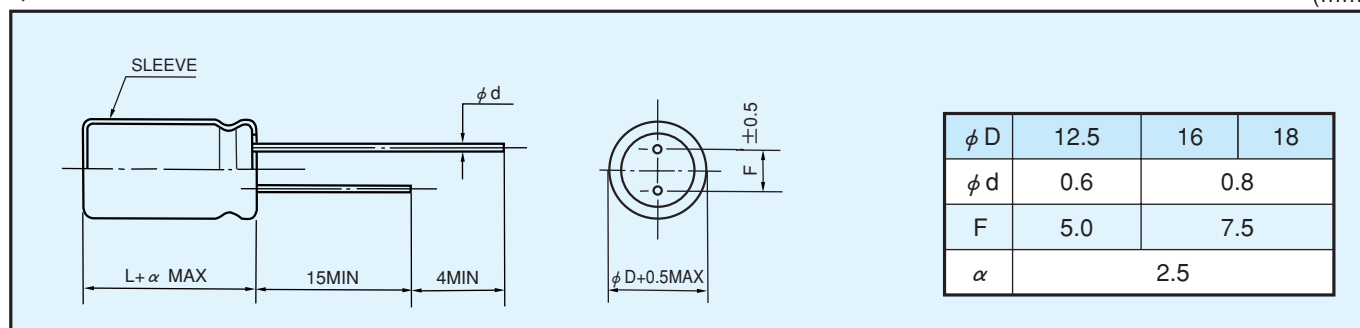
| Frequency (Hz) |           | 60 (50) | 120 | 500  | 1k   | 10k≤ |
|----------------|-----------|---------|-----|------|------|------|
| Coefficient    | 200WV     | 0.8     | 1.0 | 1.20 | 1.30 | 1.40 |
|                | 400~450WV | 0.8     | 1.0 | 1.25 | 1.40 | 1.50 |

◆PART NUMBER

□□□    VXW    □□□□□    □    □□□    □□    DXL  
 Rated Voltage    Series    Rated Capacitance    Capacitance Tolerance    Option    Lead Forming    Case Size

**◆ DIMENSIONS**

(mm)


**◆ STANDARD SIZE, RATED RIPPLE CURRENT**

| Cap<br>( $\mu F$ ) | WV<br>$\phi D$ | 200         |      |           |      |           |      |
|--------------------|----------------|-------------|------|-----------|------|-----------|------|
|                    |                | $\phi 12.5$ |      | $\phi 16$ |      | $\phi 18$ |      |
| 120                |                | 12.5×30     | 0.53 |           |      |           |      |
| 150                |                | 12.5×35     | 0.62 |           |      |           |      |
| 180                |                | 12.5×40     | 0.70 |           |      |           |      |
| 220                |                |             |      | 16×30     | 0.76 | 18×30     | 0.81 |
| 270                |                |             |      | 16×35     | 0.88 | 18×30     | 0.87 |
| 330                |                |             |      | 16×40     | 1.10 | 18×35     | 1.01 |
| 390                |                |             |      |           |      | 18×40     | 1.13 |
| 470                |                |             |      |           |      | 18×45     | 1.27 |

| Cap<br>( $\mu F$ ) | WV<br>$\phi D$ | 400         |      |           |      |           |      |
|--------------------|----------------|-------------|------|-----------|------|-----------|------|
|                    |                | $\phi 12.5$ |      | $\phi 16$ |      | $\phi 18$ |      |
| 39                 |                | 12.5×30     | 0.32 |           |      |           |      |
| 47                 |                | 12.5×35     | 0.37 |           |      |           |      |
| 56                 |                | 12.5×40     | 0.42 |           |      |           |      |
| 68                 |                |             |      | 16×30     | 0.48 |           |      |
| 82                 |                |             |      | 16×30     | 0.50 |           |      |
| 100                |                |             |      | 16×35     | 0.58 | 18×30     | 0.58 |
| 120                |                |             |      | 16×40     | 0.66 | 18×35     | 0.67 |
| 150                |                |             |      |           |      | 18×40     | 0.77 |
| 180                |                |             |      |           |      | 18×45     | 0.88 |

| Cap<br>( $\mu F$ ) | WV<br>$\phi D$ | 420         |      |           |      |           |      | 450         |      |           |      |           |      |
|--------------------|----------------|-------------|------|-----------|------|-----------|------|-------------|------|-----------|------|-----------|------|
|                    |                | $\phi 12.5$ |      | $\phi 16$ |      | $\phi 18$ |      | $\phi 12.5$ |      | $\phi 16$ |      | $\phi 18$ |      |
| 27                 |                |             |      |           |      |           |      | 12.5×30     | 0.25 |           |      |           |      |
| 33                 |                | 12.5×30     | 0.27 |           |      |           |      | 12.5×35     | 0.28 |           |      |           |      |
| 39                 |                | 12.5×35     | 0.31 |           |      |           |      | 12.5×40     | 0.32 |           |      |           |      |
| 47                 |                | 12.5×40     | 0.36 |           |      |           |      |             |      | 16×30     | 0.38 |           |      |
| 56                 |                |             |      | 16×30     | 0.43 |           |      |             |      | 16×35     | 0.44 |           |      |
| 68                 |                |             |      | 16×35     | 0.51 | 18×30     | 0.51 |             |      | 16×40     | 0.49 | 18×30     | 0.48 |
| 82                 |                |             |      | 16×40     | 0.57 | 18×30     | 0.57 |             |      |           |      | 18×30     | 0.55 |
| 100                |                |             |      |           |      | 18×35     | 0.61 |             |      |           |      | 18×35     | 0.65 |
| 120                |                |             |      |           |      | 18×40     | 0.66 |             |      |           |      | 18×40     | 0.74 |

Please check with us about individual WV, Cap., size and dimensions.

 Size  $\phi D \times L$  (mm)  
 Ripple Current (A r.m.s./105°C, 120Hz)