

VXS SERIES

NEW

105°C 5000hour, Charge-Discharge Facility, Snap-in Terminal Type

◆FEATURES

- Load Life : 105°C 5000 hours. •RoHS compliance.
- ΔV=Specified the endurance of 100million times Charge-Discharge load.



◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | |
|-----------------------------------|---|----------------------|-----------------------------------|--------------------|--|----------------------------|------------------------------------|-----------------------------|------------------------------|--------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|
| Category Temperature Range | -25~+105°C | | | | | | | | | | | | | | |
| Rated Voltage Range | 315~450V.DC | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | |
| Leakage Current(MAX) | $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I =Leakage Current(μA) C =Rated Capacitance(μF) V =Rated Voltage(V) | | | | | | | | | | | | | | |
| (tanδ) Dissipation Factor(MAX) | <table border="1"> <tr> <td>(V) Rated Voltage</td> <td>315~450</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.20</td> <td></td> </tr> </table> | (V) Rated Voltage | 315~450 | (20°C, 120Hz) | tanδ | 0.20 | | | | | | | | | |
| (V) Rated Voltage | 315~450 | (20°C, 120Hz) | | | | | | | | | | | | | |
| tanδ | 0.20 | | | | | | | | | | | | | | |
| Impedance Ratio(MAX) | <table border="1"> <tr> <td>(V) Rated Voltage</td> <td>315~450</td> <td>(120Hz)</td> </tr> <tr> <td>$Z(-25°C)/Z(20°C)$</td> <td>8</td> <td></td> </tr> </table> | (V) Rated Voltage | 315~450 | (120Hz) | $Z(-25°C)/Z(20°C)$ | 8 | | | | | | | | | |
| (V) Rated Voltage | 315~450 | (120Hz) | | | | | | | | | | | | | |
| $Z(-25°C)/Z(20°C)$ | 8 | | | | | | | | | | | | | | |
| Charge-Discharge endurance | <p>After applying the following charge discharge load for 100million times , the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Charge voltage</td> <td>Rated voltage:VR[V]</td> </tr> <tr> <td>Discharge voltage</td> <td>Rated Voltage-150V:VR-150 [V]</td> </tr> <tr> <td>Charge-Discharge frequency</td> <td>Refer to Standard Size table</td> </tr> <tr> <td>Charge-Discharge Resistance</td> <td>Refer to Standard Size table</td> </tr> </table> <table border="1"> <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> | Charge voltage | Rated voltage:VR[V] | Discharge voltage | Rated Voltage-150V:VR-150 [V] | Charge-Discharge frequency | Refer to Standard Size table | Charge-Discharge Resistance | Refer to Standard Size 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. |
| Charge voltage | Rated voltage:VR[V] | | | | | | | | | | | | | | |
| Discharge voltage | Rated Voltage-150V:VR-150 [V] | | | | | | | | | | | | | | |
| Charge-Discharge frequency | Refer to Standard Size table | | | | | | | | | | | | | | |
| Charge-Discharge Resistance | Refer to Standard Size 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. | | | | | | | | | | | | | | |
| Endurance | <p>After applying rated voltage with rated ripple current for 5000 hours at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <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. | | | | | | | | | | | | | | |

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Frequency (Hz) | | 60 | 120 | 300 | 500 | 1k | 10k≤ |
|----------------|-----------|------|------|------|------|------|------|
| Coefficient | 315~450WV | 0.80 | 1.00 | 1.16 | 1.20 | 1.30 | 1.40 |

◆OPTION

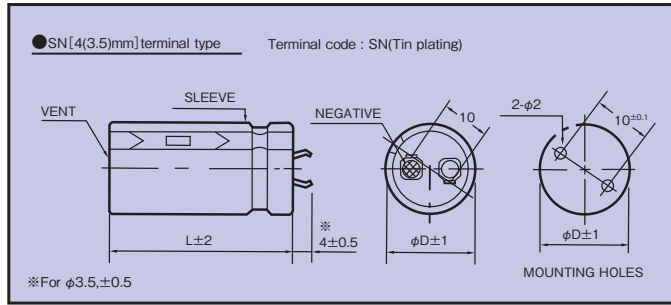
| | Code |
|--------------------------|-------|
| Pet sleeve without plate | EFC |
| PVC Sleeve without plate | OOE |
| PVC Sleeve with plate | Blank |

◆PART NUMBER

□□□ / VXS / □□□ / □ / □□□ / SN / DxL
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

| WV Cap(μF) φD | 315 | | | | 350 | | | |
|---------------------|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 120 | | | | | 22×25;0.74; 46; 10 | | | |
| 150 | 22×25;0.82; 46; 10 | | | | 22×30;0.89; 41; 10 | 25×25;0.85; 51; 10 | | |
| 180 | 22×30;0.95; 41; 10 | | | | 22×35;1.02; 37; 10 | 25×30;0.99; 38; 10 | | |
| 220 | 22×35;1.11; 37; 10 | 25×25;0.98; 43; 10 | | | 22×40;1.17; 34; 10 | 25×30;1.08; 38; 10 | 30×25;1.12; 38; 10 | |
| 270 | 22×40;1.28; 34; 10 | 25×30;1.17; 38; 9 | 30×25;1.22; 38; 9 | | 22×45;1.34; 32; 10 | 25×35;1.25; 35; 10 | 30×30;1.34; 42; 8 | 35×25;1.29; 36; 10 |
| 330 | 22×45;1.45; 32; 9 | 25×35;1.35; 35; 8 | 30×30;1.44; 34; 7 | | | 25×40;1.43; 32; 9 | 30×35;1.53; 31; 8 | 35×30;1.51; 32; 8 |
| 390 | 22×50;1.62; 30; 8 | 25×40;1.53; 32; 7 | 30×30;1.55; 34; 6 | 35×25;1.5; 35; 7 | | 25×45;1.61; 30; 8 | 30×35;1.65; 31; 7 | 35×30;1.58; 32; 8 |
| 470 | | 25×45;1.73; 30; 7 | 30×35;1.78; 31; 6 | 35×30;1.67; 31; 6 | | | 30×40;2.06; 29; 6 | 35×35;1.87; 29; 7 |
| 560 | | 25×50;1.99; 28; 6 | 30×40;2.21; 29; 5 | 35×35;2; 29; 6 | | | 30×45;2.11; 27; 6 | 35×40;2.11; 27; 6 |
| 680 | | | 30×45;2.29; 27; 4 | 35×40;2.49; 27; 4 | | | | 35×45;2.40; 25; 5 |
| 820 | | | 30×50;2.66; 26; 4 | 35×45;2.59; 25; 4 | | | | 35×50;2.69; 24; 5 |
| 1000 | | | | 35×50;2.92; 24; 4 | | | | |

| WV Cap(μF) φD | 385 | | | | 400 | | | |
|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 100 | 22×25;0.67; 46; 10 | | | | 22×25;0.67; 46; 10 | | | |
| 120 | 22×30;0.78; 41; 10 | | | | 22×30;0.79; 41; 10 | 25×25;0.76; 42; 10 | | |
| 150 | 22×35;0.92; 37; 10 | 25×25;0.83; 43; 10 | | | 22×35;0.92; 37; 10 | 25×30;0.91; 38; 10 | | |
| 180 | 22×40;1.05; 34; 10 | 25×30;0.97; 38; 10 | 30×25;1.00; 38; 10 | | 22×40;1.05; 34; 10 | 25×30;0.97; 38; 10 | 30×25;1.00; 38; 10 | |
| 220 | 22×45;1.19; 32; 10 | 25×35;1.13; 35; 10 | 30×30;1.17; 34; 10 | 35×25;1.17; 43; 10 | 22×45;1.20; 32; 10 | 25×35;1.13; 35; 10 | 30×30;1.20; 34; 10 | 35×25;1.15; 35; 10 |
| 270 | 22×50;1.36; 30; 10 | 25×40;1.29; 32; 10 | 30×30;1.29; 34; 9 | 35×30;1.34; 32; 10 | | 25×40;1.30; 32; 10 | 30×35;1.36; 31; 9 | 35×30;1.35; 32; 10 |
| 330 | | 25×45;1.47; 30; 10 | 30×35;1.49; 31; 8 | 35×30;1.44; 32; 9 | | 25×50;1.54; 28; 10 | 30×35;1.50; 31; 8 | 35×30;1.48; 32; 9 |
| 390 | | | 30×40;1.83; 29; 7 | 35×35;1.68; 29; 8 | | | 30×40;1.85; 29; 8 | 35×35;1.68; 29; 8 |
| 470 | | | 30×45;1.90; 27; 7 | 35×40;1.94; 27; 7 | | | 30×50;1.98; 26; 8 | 35×40;1.92; 27; 7 |
| 560 | | | 30×50;2.00; 26; 6 | 35×45;2.14; 25; 7 | | | | 35×45;2.15; 25; 7 |
| 680 | | | | 35×50;2.42; 24; 6 | | | | 35×50;2.43; 24; 6 |

| WV Cap(μF) φD | 420 | | | | 450 | | | |
|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 82 | 22×25;0.60; 46; 10 | | | | 22×25;0.61; 46; 10 | | | |
| 100 | 22×30;0.71; 41; 10 | | | | 22×30;0.72; 41; 10 | | | |
| 120 | 22×30;0.77; 41; 10 | 25×25;0.74; 42; 10 | | | 22×35;0.82; 37; 10 | 25×25;0.75; 42; 10 | | |
| 150 | 22×35;0.90; 37; 10 | 25×30;0.89; 38; 10 | | | 22×40;0.96; 34; 10 | 25×30;0.89; 38; 10 | 30×25;0.91; 38; 10 | |
| 180 | 22×40;1.03; 34; 10 | 25×35;1.01; 35; 10 | 30×25;0.98; 38; 10 | | 22×45;1.08; 32; 10 | 25×35;1.03; 35; 10 | 30×30;1.06; 34; 10 | 35×25;1.04; 35; 10 |
| 220 | 22×50;1.22; 30; 10 | 25×35;1.10; 35; 10 | 30×30;1.15; 34; 10 | 35×25;1.13; 35; 10 | 22×50;1.14; 30; 10 | 25×40;1.18; 32; 10 | 30×30;1.17; 34; 10 | 35×30;1.21; 32; 10 |
| 270 | | 25×45;1.33; 30; 10 | 30×35;1.33; 31; 10 | 35×30;1.35; 32; 10 | | 25×45;1.34; 30; 10 | 30×35;1.35; 31; 10 | 35×30;1.34; 32; 10 |
| 330 | | 25×50;1.50; 28; 10 | 30×40;1.53; 29; 10 | 35×35;1.53; 29; 10 | | | 30×40;1.55; 29; 10 | 35×35;1.55; 29; 10 |
| 390 | | | 30×45;1.72; 27; 9 | 35×35;1.65; 29; 8 | | | 30×50;1.80; 32; 9 | 35×40;1.75; 27; 9 |
| 470 | | | 30×50;1.93; 26; 8 | 35×40;1.88; 27; 7 | | | | 35×45;1.97; 25; 8 |
| 560 | | | | 35×45;2.11; 25; 7 | | | | 35×50;2.21; 24; 7 |

