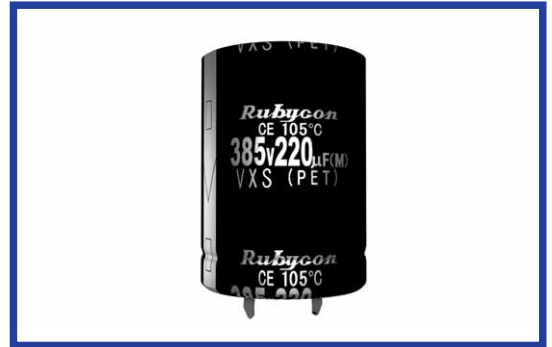
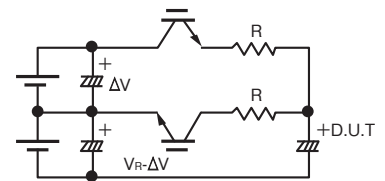


VXS SERIES
105°C Charge-Discharge Specification

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


◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | |
|--|---|--------------------|-----------------------------------|--------------------|--|----------------------------|------------------------------------|-----------------------------|------------------------------|--------------------|-----------------------------------|--------------------|--|-----------------|
| Category Temperature Range | -25~+105°C | | | | | | | | | | | | | |
| Rated Voltage Range | 315~450Vdc | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | |
| Leakage Current(MAX) | $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I =Leakage Current(μ A) C =Capacitance(μ F) V =Rated Voltage(Vdc) | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tan δ) | 0.2 (20°C, 120Hz) | | | | | | | | | | | | | |
| Charge-Discharge endurance | After applying the following charge discharge load for 100million times, the capacitors shall meet the following requirements. | | | | | | | | | | | | | |
| | <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 |
| 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 | After applying rated voltage with rated ripple current for 5000 hours at 105°C, the capacitors shall meet the following requirements. | | | | | | | | | | | | | |
| | <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. | | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio(MAX) | Rated Voltage (Vdc) 315~450 (120Hz) | | | | | | | | | | | | | |
| | Z(-25°C)/Z(20°C) 8 | | | | | | | | | | | | | |


◆MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | 60(50) | 120(100) | 300 | 500 | 1k | 10k≤ |
|----------------|--------|----------|------|------|------|------|
| Coefficient | 0.80 | 1.00 | 1.16 | 1.20 | 1.30 | 1.40 |

◆OPTION

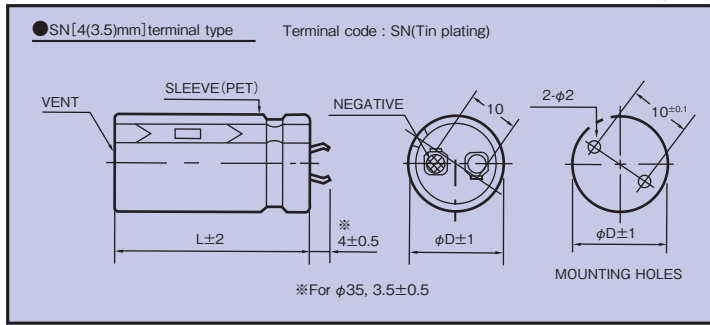
| | Code |
|--------------------------|------|
| PET sleeve without plate | EFC |

◆PART NUMBER

□□□ / **VXS** / □□□□□ / **M** / □□□ / **SN** / DXL
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code Case Size

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

| Cap(μF) φD | 315 | | | | 350 | | | |
|------------|------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 120 | | | | | 22x25;0.92;46;10 | | | |
| 150 | 22x25;1.00;46;10 | | | | 22x30;1.08;41;10 | 25x25;1.05;51;10 | | |
| 180 | 22x30;1.15;41;10 | | | | 22x35;1.22;37;10 | 25x30;1.21;38;10 | | |
| 220 | 22x35;1.32;37;10 | 25x25;1.19;43;10 | | | 22x40;1.39;34;10 | 25x30;1.30;38;10 | 30x25;1.35;38;10 | |
| 270 | 22x40;1.50;34;10 | 25x30;1.38;38;9 | 30x25;1.44;38;9 | | 22x45;1.57;32;10 | 25x35;1.49;35;10 | 30x30;1.56;42;8 | 35x25;1.50;36;10 |
| 330 | 22x45;1.69;32;9 | 25x35;1.58;35;8 | 30x30;1.67;34;7 | | 22x50;1.77;31;9 | 25x40;1.68;32;9 | 30x35;1.78;31;8 | 35x30;1.75;32;8 |
| 390 | 22x50;1.88;30;8 | 25x40;1.77;32;7 | 30x30;1.76;34;6 | 35x25;1.64;35;7 | 22x55;1.96;28;8 | 25x45;1.87;30;8 | 30x35;1.89;31;7 | 35x30;1.83;32;8 |
| 470 | 22x60;2.15;27;7 | 25x45;1.98;30;7 | 30x35;2.01;31;6 | 35x30;1.92;31;6 | | 25x50;2.08;29;7 | 30x40;2.13;29;6 | 35x35;2.08;29;7 |
| 560 | | 25x50;2.20;28;6 | 30x40;2.25;29;5 | 35x35;2.18;29;6 | | 25x60;2.38;25;7 | 30x45;2.37;27;6 | 35x40;2.33;27;6 |
| 680 | | 25x60;2.53;25;5 | 30x45;2.51;27;4 | 35x40;2.49;27;4 | | | 30x50;2.63;26;5 | 35x45;2.60;25;5 |
| 820 | | | 30x50;2.79;26;4 | 35x45;2.73;25;4 | | | 30x60;3.01;22;5 | 35x50;2.87;24;5 |
| 1000 | | | 30x60;3.20;22;4 | 35x50;3.01;24;4 | | | | 35x55;3.15;22;4 |
| 1200 | | | | 35x55;3.28;22;3 | | | | 35x60;3.42;20;3 |

| Cap(μF) φD | 385 | | | | 400 | | | |
|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 100 | 22x25;0.84;46;10 | | | | 22x25;0.85;46;10 | | | |
| 120 | 22x30;0.97;41;10 | | | | 22x30;0.97;41;10 | 25x25;0.96;42;10 | | |
| 150 | 22x35;1.12;37;10 | 25x25;1.04;43;10 | | | 22x35;1.13;37;10 | 25x30;1.11;38;10 | | |
| 180 | 22x40;1.26;34;10 | 25x30;1.19;38;10 | 30x25;1.24;38;10 | | 22x40;1.27;34;10 | 25x30;1.20;38;10 | 30x25;1.24;38;10 | |
| 220 | 22x45;1.43;32;10 | 25x35;1.37;35;10 | 30x30;1.43;34;10 | 35x25;1.39;43;10 | 22x45;1.44;32;10 | 25x35;1.37;35;10 | 30x30;1.43;34;10 | 35x25;1.39;35;10 |
| 270 | 22x50;1.61;30;10 | 25x40;1.55;32;10 | 30x30;1.55;34;9 | 35x30;1.62;32;10 | 22x50;1.62;31;9 | 25x40;1.55;32;10 | 30x35;1.63;31;9 | 35x30;1.62;32;10 |
| 330 | 22x55;1.82;29;10 | 25x45;1.75;30;10 | 30x35;1.76;31;8 | 35x30;1.72;32;9 | 22x60;1.87;27;9 | 25x50;1.82;28;10 | 30x35;1.77;31;8 | 35x30;1.72;32;9 |
| 390 | | 25x50;1.93;29;9 | 30x40;1.97;29;7 | 35x35;1.95;29;8 | | 25x55;2.01;26;9 | 30x40;1.97;29;8 | 35x35;1.95;29;8 |
| 470 | | 25x55;2.14;26;7 | 30x45;2.20;27;7 | 35x40;2.19;27;7 | | 25x60;2.22;25;8 | 30x50;2.29;26;8 | 35x40;2.19;27;7 |
| 560 | | | 30x50;2.44;26;6 | 35x45;2.43;25;7 | | | 30x55;2.53;25;7 | 35x45;2.43;25;7 |
| 680 | | | 30x55;2.70;24;6 | 35x50;2.70;24;6 | | | 30x60;2.80;23;6 | 35x50;2.69;24;6 |
| 820 | | | | 35x55;2.97;22;5 | | | | 35x55;2.96;22;5 |
| 1000 | | | | 35x60;3.25;21;4 | | | | |

| Cap(μF) φD | 420 | | | | 450 | | | |
|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | φ22 | φ25 | φ30 | φ35 | φ22 | φ25 | φ30 | φ35 |
| 82 | 22x25;0.76;46;10 | | | | 22x25;0.77;46;10 | | | |
| 100 | 22x30;0.88;41;10 | | | | 22x30;0.89;41;10 | | | |
| 120 | 22x30;0.96;41;10 | 25x25;0.94;42;10 | | | 22x35;1.01;37;10 | 25x25;0.94;42;10 | | |
| 150 | 22x35;1.11;37;10 | 25x30;1.09;38;10 | | | 22x40;1.16;34;10 | 25x30;1.10;38;10 | 30x25;1.14;38;10 | |
| 180 | 22x40;1.25;34;10 | 25x35;1.24;35;10 | 30x25;1.22;38;10 | | 22x45;1.30;32;10 | 25x35;1.25;35;10 | 30x30;1.30;34;10 | 35x25;1.28;35;10 |
| 220 | 22x50;1.46;30;10 | 25x35;1.34;35;10 | 30x30;1.41;34;10 | 35x25;1.37;35;10 | 22x50;1.47;30;10 | 25x40;1.42;32;10 | 30x30;1.41;34;10 | 35x30;1.48;32;10 |
| 270 | 22x55;1.64;29;10 | 25x45;1.59;30;10 | 30x35;1.61;31;10 | 35x30;1.58;32;10 | 22x60;1.70;27;10 | 25x45;1.60;30;10 | 30x35;1.62;31;10 | 35x30;1.59;32;10 |
| 330 | | 25x50;1.79;28;10 | 30x40;1.82;29;10 | 35x35;1.81;29;10 | | 25x55;1.86;27;10 | 30x40;1.83;29;10 | 35x35;1.81;29;10 |
| 390 | | 25x55;1.97;27;9 | 30x45;2.02;27;9 | 35x35;1.91;29;8 | | 25x60;2.04;25;9 | 30x50;2.11;32;9 | 35x40;2.02;27;9 |
| 470 | | | 30x50;2.25;26;8 | 35x40;2.14;27;7 | | | 30x55;2.34;24;8 | 35x45;2.26;25;8 |
| 560 | | | 30x55;2.48;24;7 | 35x45;2.38;25;7 | | | | 35x50;2.49;24;7 |
| 680 | | | | 35x50;2.63;24;6 | | | | |
| 820 | | | | 35x60;3.02;21;5 | | | | |

↑ ↑ ↑ ↑
 Charge-Discharge Frequency[Hz]
 Charge-Discharge Resistance[Ω]
 Ripple Current (A r.m.s./120Hz,105°C)
 Case Size φD×L(mm)