

VXH series

105°C 5000 時間 小形化品
Load Life : 105°C 5000 hours, Miniaturized



◆規格表 / SPECIFICATIONS

| 項目 Item | 特性 Characteristics | | | | | | | | | | |
|--|---|-------------------------------|--|------------------------------|--|-------------------------|---|------|---|----|--|
| カテゴリ温度範囲 Category Temperature Range | -25~+105°C | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 200~500Vdc | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | |
| 漏れ電流 Leakage Current (MAX) | $I=3\sqrt{CV}$ (定格電圧印加5分後) $I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) I=漏れ電流 (μA) C=静電容量 (μF) V=定格電圧 (Vdc) Leakage Current Capacitance Rated Voltage | | | | | | | | | | |
| 損失角の正接 (tan δ) Dissipation Factor (MAX) | <table border="1"> <tr> <td>定格電圧 (Vdc) Rated Voltage</td> <td>200~ 450</td> <td>475, 500</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.20</td> <td>0.25</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 200~ 450 | 475, 500 | (20°C, 120Hz) | tan δ | 0.20 | 0.25 | | | |
| 定格電圧 (Vdc) Rated Voltage | 200~ 450 | 475, 500 | (20°C, 120Hz) | | | | | | | | |
| tan δ | 0.20 | 0.25 | | | | | | | | | |
| 耐久性 Endurance | <p>105°C 中で5000時間定格電圧(リップル重畳)印加後、下記項目を満足すること。 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>静電容量変化率 Capacitance Change</td> <td>初期値の ±20% (10WVは±25%)以内 Within ±20% (For 10WV ; ±25%) of the initial value.</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の 200% 以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> </tr> </table> | 静電容量変化率 Capacitance Change | 初期値の ±20% (10WVは±25%)以内 Within ±20% (For 10WV ; ±25%) of the initial value. | 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | |
| 静電容量変化率 Capacitance Change | 初期値の ±20% (10WVは±25%)以内 Within ±20% (For 10WV ; ±25%) of the initial value. | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX) | <table border="1"> <tr> <td>定格電圧 (Vdc) Rated Voltage</td> <td>200~ 250</td> <td>315~ 450</td> <td>475, 500</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>8</td> <td>10</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 200~ 250 | 315~ 450 | 475, 500 | (120Hz) | Z(-25°C)/Z(+20°C) | 3 | 8 | 10 | |
| 定格電圧 (Vdc) Rated Voltage | 200~ 250 | 315~ 450 | 475, 500 | (120Hz) | | | | | | | |
| Z(-25°C)/Z(+20°C) | 3 | 8 | 10 | | | | | | | | |

◆呼称方法 / PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-----------------------|---------------------|
| □□□ | VXH | □□□□□ | M | □□□ | SN | D x L |
| 定格電圧 Rated Voltage | シリーズ名 Series | 静電容量 Capacitance | 静電容量許容差 Capacitance Tolerance | 副記号 Option | 端子記号 Terminal Code | ケースサイズ Case Size |

◆リップル電流補正係数 /
MULTIPLIER FOR RIPPLE CURRENT

| 周波数 (Hz) Frequency | 60 (50) | 120 (100) | 300 | 500 | 1k | 10k ≤ |
|-----------------------|------------|--------------|------|------|------|-------|
| 200~ 250Vdc | 0.80 | 1.00 | 1.15 | 1.20 | 1.30 | 1.50 |
| 315~ 500Vdc | 0.80 | 1.00 | 1.15 | 1.20 | 1.25 | 1.40 |

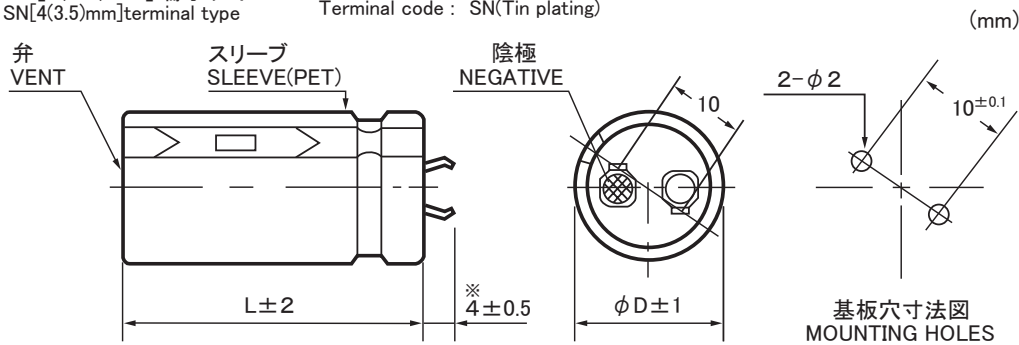
◆副記号 / OPTION

EFC : PET スリーブ、底板なし
PET Sleeve without plate

◆寸法図/DIMENSIONS

●SN[4(3.5)mm]端子タイプ
SN[4(3.5)mm]terminal type

端子記号 : SN(錫メッキ)
Terminal code : SN(Tin plating)



◆標準品一覧表/STANDARD SIZE

| Cap. (μ F) | 200Vdc | | | | | | | 220Vdc | | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|------|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | | |
| 270 | | | | | | | | 22×25 | 1.33 | | | | | | | |
| 330 | 22×25 | 1.41 | | | | | | 22×30 | 1.55 | | | | | | | |
| 390 | 22×30 | 1.63 | | | | | | 22×30 | 1.63 | 25×25 | 1.50 | | | | | |
| 470 | 22×30 | 1.72 | 25×25 | 1.57 | | | | 22×35 | 1.85 | 25×30 | 1.76 | | | | | |
| 560 | 22×35 | 1.95 | 25×30 | 1.84 | | | | 22×40 | 2.08 | 25×30 | 1.83 | 30×25 | 1.64 | | | |
| 680 | 22×40 | 2.22 | 25×35 | 2.11 | 30×25 | 1.69 | | 22×45 | 2.34 | 25×35 | 2.10 | 30×30 | 1.94 | | | |
| 820 | 22×50 | 2.60 | 25×40 | 2.37 | 30×30 | 2.01 | 35×25 | 1.68 | 22×55 | 2.73 | 25×40 | 2.35 | 30×30 | 1.99 | 35×25 | 1.89 |
| 1000 | 22×60 | 3.00 | 25×45 | 2.63 | 30×35 | 2.30 | 35×30 | 2.02 | | 25×45 | 2.65 | 30×35 | 2.26 | 35×30 | 2.15 | |
| 1200 | | | 25×50 | 2.88 | 30×40 | 2.55 | 35×30 | 2.22 | | 25×60 | 3.19 | 30×40 | 2.53 | 35×35 | 2.48 | |
| 1500 | | | | | 30×45 | 2.80 | 35×35 | 2.56 | | | | 30×50 | 2.97 | 35×40 | 2.50 | |
| 1800 | | | | | 30×50 | 3.08 | 35×40 | 2.85 | | | | 30×60 | 3.43 | 35×45 | 3.04 | |
| 2200 | | | | | | | 35×50 | 3.14 | | | | | | 35×55 | 3.18 | |
| 2700 | | | | | | | 35×60 | 3.49 | | | | | | | | |

| Cap. (μ F) | 250Vdc | | | | | | | 315Vdc | | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|-----------|------|-----------|------|-----------|------|-----------|------|--|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | | |
| 150 | | | | | | | | 22×25 | 1.00 | | | | | | | |
| 180 | | | | | | | | 22×30 | 1.14 | | | | | | | |
| 220 | | | | | | | | 22×35 | 1.31 | 25×25 | 1.20 | | | | | |
| 270 | 22×25 | 1.32 | | | | | | 22×40 | 1.49 | 25×30 | 1.39 | | | | | |
| 330 | 22×30 | 1.54 | 25×25 | 1.45 | | | | 22×45 | 1.69 | 25×35 | 1.59 | 30×25 | 1.41 | | | |
| 390 | 22×35 | 1.75 | 25×30 | 1.68 | | | | 22×50 | 1.87 | 25×40 | 1.78 | 30×30 | 1.63 | 35×25 | 1.48 | |
| 470 | 22×40 | 1.97 | 25×30 | 1.75 | | | | 22×55 | 2.09 | 25×45 | 1.99 | 30×35 | 1.86 | 35×30 | 1.74 | |
| 560 | 22×45 | 2.20 | 25×35 | 1.99 | 30×25 | 1.63 | | 22×60 | 2.29 | 25×50 | 2.21 | 30×40 | 2.08 | 35×30 | 1.76 | |
| 680 | 22×50 | 2.45 | 25×40 | 2.25 | 30×30 | 1.92 | 35×25 | 1.80 | | 25×55 | 2.44 | 30×45 | 2.32 | 35×35 | 2.01 | |
| 820 | 22×60 | 2.81 | 25×45 | 2.49 | 30×35 | 2.19 | 35×30 | 1.94 | | 25×60 | 2.68 | 30×50 | 2.55 | 35×40 | 2.26 | |
| 1000 | | | 25×55 | 2.91 | 30×40 | 2.44 | 35×35 | 2.38 | | | | 30×55 | 2.78 | 35×50 | 2.70 | |
| 1200 | | | | | 30×45 | 2.68 | 35×40 | 2.47 | | | | 30×60 | 3.01 | 35×55 | 2.92 | |
| 1500 | | | | | 30×55 | 3.15 | 35×45 | 2.92 | | | | | | 35×60 | 3.12 | |
| 1800 | | | | | | | 35×50 | 3.04 | | | | | | | | |
| 2200 | | | | | | | 35×60 | 3.37 | | | | | | | | |

ケースサイズ Case Size $\phi D \times L$ (mm) \uparrow
リップル電流 Ripple Current (A.r.m.s./120Hz,105°C) \uparrow

◆標準品一覧表 / STANDARD SIZE

| Cap. (μ F) | 350Vdc | | | | | | | | 385Vdc | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 120 | 22×25 | 0.92 | | | | | | | 22×25 | 0.93 | | | | | | |
| 150 | 22×30 | 1.08 | | | | | | | 22×30 | 1.08 | | | | | | |
| 180 | 22×35 | 1.22 | 25×25 | 1.13 | | | | | 22×30 | 1.17 | 25×25 | 1.13 | | | | |
| 220 | 22×40 | 1.39 | 25×30 | 1.30 | | | | | 22×35 | 1.33 | 25×30 | 1.31 | | | | |
| 270 | 22×45 | 1.57 | 25×35 | 1.49 | 30×25 | 1.34 | | | 22×45 | 1.58 | 25×35 | 1.50 | 30×25 | 1.33 | | |
| 330 | 22×50 | 1.77 | 25×40 | 1.69 | 30×30 | 1.56 | 35×25 | 1.42 | 22×50 | 1.78 | 25×40 | 1.70 | 30×30 | 1.55 | 35×25 | 1.40 |
| 390 | 22×55 | 1.96 | 25×45 | 1.88 | 30×35 | 1.77 | 35×30 | 1.66 | 22×60 | 2.03 | 25×45 | 1.88 | 30×35 | 1.76 | 35×30 | 1.64 |
| 470 | 22×60 | 2.17 | 25×50 | 2.09 | 30×40 | 1.99 | 35×35 | 1.90 | | | 25×55 | 2.18 | 30×40 | 1.97 | 35×35 | 1.87 |
| 560 | | | 25×55 | 2.30 | 30×45 | 2.20 | 35×40 | 2.13 | | | 25×60 | 2.39 | 30×45 | 2.18 | 35×35 | 1.89 |
| 680 | | | | | 30×50 | 2.43 | 35×40 | 2.17 | | | | | 30×50 | 2.40 | 35×40 | 2.12 |
| 820 | | | | | 30×55 | 2.65 | 35×45 | 2.39 | | | | | 30×60 | 2.76 | 35×50 | 2.53 |
| 1000 | | | | | | | 35×50 | 2.61 | | | | | | | 35×55 | 2.74 |
| 1200 | | | | | | | 35×60 | 3.01 | | | | | | | | |

| Cap. (μ F) | 400Vdc | | | | | | | | 420Vdc | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 100 | | | | | | | | | 22×25 | 0.85 | | | | | | |
| 120 | 22×25 | 0.91 | | | | | | | 22×30 | 0.97 | | | | | | |
| 150 | 22×30 | 1.06 | 25×25 | 1.04 | | | | | 22×35 | 1.12 | 25×25 | 1.03 | | | | |
| 180 | 22×35 | 1.21 | 25×30 | 1.19 | | | | | 22×40 | 1.26 | 25×30 | 1.19 | | | | |
| 220 | 22×40 | 1.37 | 25×30 | 1.28 | 30×25 | 1.25 | | | 22×45 | 1.43 | 25×35 | 1.36 | 30×25 | 1.23 | | |
| 270 | 22×45 | 1.56 | 25×35 | 1.47 | 30×30 | 1.45 | | | 22×50 | 1.61 | 25×40 | 1.55 | 30×30 | 1.44 | 35×25 | 1.32 |
| 330 | 22×55 | 1.81 | 25×40 | 1.66 | 30×30 | 1.55 | 35×25 | 1.36 | 22×60 | 1.86 | 25×45 | 1.74 | 30×35 | 1.64 | 35×30 | 1.55 |
| 390 | | | 25×50 | 1.93 | 30×35 | 1.72 | 35×30 | 1.61 | | | 25×55 | 2.00 | 30×40 | 1.83 | 35×35 | 1.76 |
| 470 | | | 25×55 | 2.14 | 30×40 | 1.93 | 35×35 | 1.83 | | | 25×60 | 2.20 | 30×45 | 2.04 | 35×35 | 1.80 |
| 560 | | | | | 30×45 | 2.13 | 35×40 | 2.04 | | | | | 30×50 | 2.24 | 35×40 | 2.07 |
| 680 | | | | | 30×55 | 2.48 | 35×45 | 2.26 | | | | | 30×60 | 2.57 | 35×50 | 2.43 |
| 820 | | | | | | | 35×50 | 2.47 | | | | | | | 35×55 | 2.60 |
| 1000 | | | | | | | 35×60 | 2.85 | | | | | | | | |

| Cap. (μ F) | 450Vdc | | | | | | | | 475Vdc | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 68 | | | | | | | | | 22×25 | 0.68 | | | | | | |
| 82 | | | | | | | | | 22×30 | 0.78 | | | | | | |
| 100 | 22×25 | 0.85 | | | | | | | 22×35 | 0.90 | 25×25 | 0.85 | | | | |
| 120 | 22×30 | 0.98 | 25×25 | 0.96 | | | | | 22×35 | 0.98 | 25×30 | 0.97 | | | | |
| 150 | 22×35 | 1.13 | 25×30 | 1.12 | | | | | 22×45 | 1.16 | 25×35 | 1.12 | 30×25 | 1.05 | | |
| 180 | 22×40 | 1.27 | 25×30 | 1.19 | 30×25 | 1.17 | | | 22×50 | 1.30 | 25×40 | 1.26 | 30×30 | 1.21 | 35×25 | 1.17 |
| 220 | 22×45 | 1.44 | 25×35 | 1.37 | 30×30 | 1.36 | 35×25 | 1.27 | 22×60 | 1.50 | 25×45 | 1.43 | 30×35 | 1.38 | 35×30 | 1.36 |
| 270 | 22×55 | 1.68 | 25×45 | 1.62 | 30×30 | 1.43 | 35×30 | 1.48 | | | 25×50 | 1.61 | 30×40 | 1.57 | 35×30 | 1.43 |
| 330 | | | 25×50 | 1.82 | 30×40 | 1.75 | 35×30 | 1.53 | | | 25×60 | 1.85 | 30×45 | 1.76 | 35×35 | 1.63 |
| 390 | | | 25×55 | 2.00 | 30×45 | 1.93 | 35×35 | 1.74 | | | | | 30×50 | 1.94 | 35×40 | 1.82 |
| 470 | | | | | 30×50 | 2.14 | 35×40 | 1.95 | | | | | 30×60 | 2.22 | 35×45 | 2.02 |
| 560 | | | | | 30×55 | 2.36 | 35×45 | 2.16 | | | | | | | 35×55 | 2.34 |
| 680 | | | | | | | 35×50 | 2.41 | | | | | | | | |

| Cap. (μ F) | 500Vdc | | | | | | | |
|--------------------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 56 | 22×25 | 0.64 | | | | | | |
| 68 | 22×30 | 0.73 | | | | | | |
| 82 | 22×30 | 0.80 | 25×25 | 0.79 | | | | |
| 100 | 22×35 | 0.92 | 25×30 | 0.91 | | | | |
| 120 | 22×40 | 1.03 | 25×35 | 1.04 | 30×25 | 0.98 | | |
| 150 | 22×50 | 1.22 | 25×40 | 1.19 | 30×30 | 1.14 | 35×25 | 1.11 |
| 180 | 22×60 | 1.39 | 25×45 | 1.33 | 30×35 | 1.30 | 35×30 | 1.28 |
| 220 | | | 25×50 | 1.50 | 30×40 | 1.47 | 35×30 | 1.35 |
| 270 | | | 25×60 | 1.73 | 30×45 | 1.65 | 35×35 | 1.54 |
| 330 | | | | | 30×55 | 1.91 | 35×40 | 1.74 |
| 390 | | | | | 30×60 | 2.10 | 35×45 | 1.92 |
| 470 | | | | | | | 35×55 | 2.23 |

ケースサイズ Case Size ϕ D×L(mm) \rightarrow
リップル電流 Ripple Current (A.r.m.s./120Hz,105°C) \rightarrow