

HXG series

105°C 3000 時間 高リップル 小形化品
Load Life : 105°C 3000 hours , High Ripple Current, 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 | 160~250, 400~450Vdc | | | | | | | | |
| 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>160~450</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.20</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 160~450 | (20°C, 120Hz) | tan δ | 0.20 | | | |
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| tan δ | 0.20 | | | | | | | | |
| 耐久性 Endurance | 105°C 中で3000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 3000 hours at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の ±20% 以内 Within ±20% 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% 以内 Within ±20% 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. | | |
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| 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>160~250</td> <td>400~450</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>8</td> <td></td> </tr> </table> | 定格電圧 (Vdc) Rated Voltage | 160~250 | 400~450 | (120Hz) | Z(-25°C)/Z(+20°C) | 4 | 8 | |
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| Z(-25°C)/Z(+20°C) | 4 | 8 | | | | | | | |

◆呼称方法 / PART NUMBER

HXG M SN D x L
 定格電圧 シリーズ名 静電容量 静電容量許容差 副記号 端子記号 ケースサイズ
 Rated Voltage Series Capacitance Capacitance Tolerance Option Terminal Code 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 ≤ |
|-----------------------|--------------------|--------------|------|------|------|-------|
| 係数 Coefficient | 160~250Vdc 0.80 | 1.00 | 1.15 | 1.20 | 1.30 | 1.50 |
| | 400~450Vdc 0.80 | 1.00 | 1.15 | 1.20 | 1.25 | 1.40 |

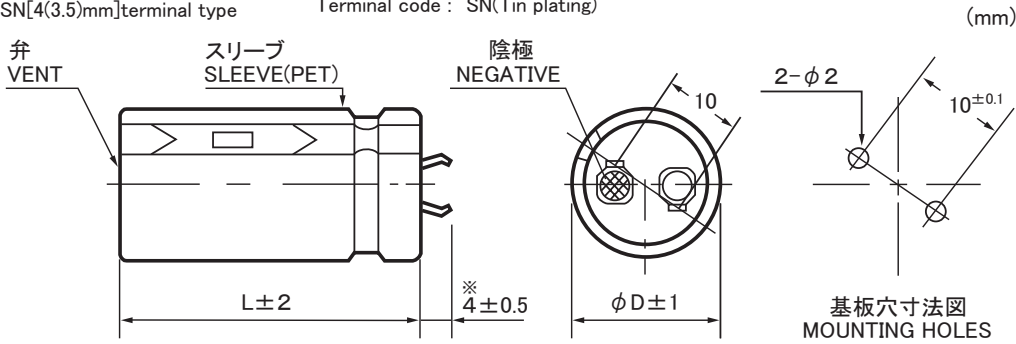
◆副記号 / OPTION

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) | 160Vdc | | | | 180Vdc | | | |
|----------------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 30 | | ϕ 35 | | ϕ 30 | | ϕ 35 | |
| 560 | | | | | 30×25 | 2.99 | | |
| 680 | 30×25 | 3.18 | | | 30×30 | 3.45 | | |
| 820 | 30×30 | 3.68 | | | 30×30 | 3.70 | 35×25 | 3.56 |
| 1000 | 30×35 | 4.20 | 35×25 | 3.72 | 30×35 | 4.22 | 35×30 | 4.14 |
| 1200 | 30×35 | 4.47 | 35×30 | 4.34 | 30×40 | 4.75 | 35×30 | 4.33 |
| 1500 | 30×45 | 5.35 | 35×35 | 4.99 | 30×45 | 5.37 | 35×35 | 4.97 |
| 1800 | 30×50 | 5.93 | 35×40 | 5.59 | 30×50 | 5.95 | 35×40 | 5.58 |
| 2200 | 30×55 | 6.58 | 35×45 | 6.23 | 30×60 | 6.85 | 35×50 | 6.57 |
| 2700 | | | 35×50 | 6.89 | | | 35×55 | 7.23 |
| 3300 | | | 35×60 | 7.92 | | | | |

| Cap.(μ F) | 200Vdc | | | | 220Vdc | | | |
|----------------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 30 | | ϕ 35 | | ϕ 30 | | ϕ 35 | |
| 470 | | | | | 30×25 | 2.84 | | |
| 560 | 30×25 | 3.01 | | | 30×30 | 3.26 | | |
| 680 | 30×30 | 3.48 | | | 30×30 | 3.50 | 35×25 | 3.37 |
| 820 | 30×35 | 3.95 | 35×25 | 3.54 | 30×35 | 3.98 | 35×30 | 3.91 |
| 1000 | 30×35 | 4.24 | 35×30 | 4.13 | 30×40 | 4.50 | 35×35 | 4.46 |
| 1200 | 30×40 | 4.76 | 35×35 | 4.70 | 30×50 | 5.23 | 35×40 | 5.00 |
| 1500 | 30×50 | 5.62 | 35×40 | 5.33 | 30×55 | 5.87 | 35×45 | 5.62 |
| 1800 | 30×60 | 6.43 | 35×45 | 5.92 | | | 35×50 | 6.21 |
| 2200 | | | 35×55 | 6.87 | | | 35×60 | 7.13 |
| 2700 | | | 35×60 | 7.53 | | | | |

| Cap.(μ F) | 250Vdc | | | |
|----------------|-----------|------|-----------|------|
| | ϕ 30 | | ϕ 35 | |
| 390 | 30×25 | 2.67 | | |
| 470 | 30×30 | 3.06 | | |
| 560 | 30×30 | 3.28 | 35×25 | 3.18 |
| 680 | 30×35 | 3.73 | 35×30 | 3.69 |
| 820 | 30×40 | 4.19 | 35×35 | 4.19 |
| 1000 | 30×45 | 4.71 | 35×35 | 4.46 |
| 1200 | 30×50 | 5.23 | 35×40 | 5.00 |
| 1500 | 30×60 | 6.07 | 35×45 | 5.62 |
| 1800 | | | 35×55 | 6.48 |
| 2200 | | | 35×60 | 7.13 |

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

◆標準品一覧表 / STANDARD SIZE

| Cap.(μ F) | 400Vdc | | | | | | | | | |
|----------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 20 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 68 | 20×25 | 0.94 | | | | | | | | |
| 82 | 20×25 | 1.01 | 22×25 | 1.07 | | | | | | |
| 100 | 20×30 | 1.18 | 22×25 | 1.15 | | | | | | |
| 120 | 20×35 | 1.35 | 22×30 | 1.34 | 25×25 | 1.31 | | | | |
| 150 | 20×40 | 1.56 | 22×35 | 1.55 | 25×25 | 1.43 | | | | |
| 180 | 20×45 | 1.76 | 22×40 | 1.76 | 25×30 | 1.65 | 30×25 | 1.68 | | |
| 220 | | | 22×45 | 1.99 | 25×35 | 1.90 | 30×30 | 1.88 | | |
| 270 | | | 22×50 | 2.24 | 25×40 | 2.16 | 30×30 | 2.01 | 35×25 | 2.12 |
| 330 | | | | | 25×50 | 2.55 | 30×35 | 2.31 | 35×30 | 2.33 |
| 390 | | | | | | | 30×40 | 2.59 | 35×35 | 2.52 |
| 470 | | | | | | | 30×50 | 3.04 | 35×40 | 2.85 |
| 560 | | | | | | | | | 35×45 | 3.18 |
| 680 | | | | | | | | | 35×50 | 3.47 |

| Cap.(μ F) | 420Vdc | | | | | | | | | |
|----------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 20 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 68 | 20×25 | 0.92 | | | | | | | | |
| 82 | 20×30 | 1.07 | 22×25 | 1.05 | | | | | | |
| 100 | 20×35 | 1.23 | 22×30 | 1.22 | 25×25 | 1.20 | | | | |
| 120 | 20×40 | 1.40 | 22×30 | 1.31 | 25×25 | 1.29 | | | | |
| 150 | 20×45 | 1.60 | 22×35 | 1.52 | 25×30 | 1.51 | 30×25 | 1.49 | | |
| 180 | 20×50 | 1.79 | 22×40 | 1.72 | 25×35 | 1.73 | 30×25 | 1.59 | | |
| 220 | | | 22×50 | 2.03 | 25×40 | 1.97 | 30×30 | 1.85 | 35×25 | 1.74 |
| 270 | | | | | 25×45 | 2.22 | 30×35 | 2.12 | 35×30 | 2.04 |
| 330 | | | | | | | 30×40 | 2.41 | 35×30 | 2.16 |
| 390 | | | | | | | 30×45 | 2.68 | 35×35 | 2.45 |
| 470 | | | | | | | 30×50 | 2.98 | 35×45 | 2.92 |
| 560 | | | | | | | | | 35×50 | 3.23 |

| Cap.(μ F) | 450Vdc | | | | | | | | | |
|----------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | ϕ 20 | | ϕ 22 | | ϕ 25 | | ϕ 30 | | ϕ 35 | |
| 56 | 20×25 | 0.85 | | | | | | | | |
| 68 | 20×25 | 0.92 | 22×25 | 0.97 | | | | | | |
| 82 | 20×30 | 1.07 | 22×25 | 1.05 | | | | | | |
| 100 | 20×35 | 1.23 | 22×30 | 1.22 | 25×25 | 1.20 | | | | |
| 120 | 20×40 | 1.40 | 22×35 | 1.39 | 25×25 | 1.29 | | | | |
| 150 | 20×50 | 1.66 | 22×40 | 1.60 | 25×30 | 1.51 | 30×25 | 1.49 | | |
| 180 | | | 22×45 | 1.80 | 25×35 | 1.73 | 30×30 | 1.72 | | |
| 220 | | | | | 25×40 | 1.97 | 30×30 | 1.85 | 35×25 | 1.74 |
| 270 | | | | | 25×50 | 2.32 | 30×35 | 2.12 | 35×30 | 2.04 |
| 330 | | | | | | | 30×45 | 2.53 | 35×35 | 2.33 |
| 390 | | | | | | | 30×50 | 2.80 | 35×40 | 2.61 |
| 470 | | | | | | | | | 35×45 | 2.92 |
| 560 | | | | | | | | | 35×50 | 3.23 |

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