

HXW series

105℃ 2000～3000時間 超小形化品 -40℃対応
105℃ 2000～3000 hours, Ultra Miniaturized, -40℃～105℃



◆規格表／SPECIFICATIONS

| 項目 Item | 特性 Characteristics | | | | | | | | | | | | | | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------|---------------------|----------------------|------------------------------|------------------------------------------------------------|------------|------|-------------------------|---------------------------------------------|-----------------|----------------------------------|----|----|----|
| カテゴリ温度範囲 Category Temperature Range | -40～+105℃ | | | | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 400～500Vdc | | | | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20% (20℃, 120Hz) | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current (MAX) | I=3√CV (定格電圧印加5分後) I=3√CV (After 5 minutes application of rated voltage) I=漏れ電流 (μ A) C=静電容量 (μ F) V=定格電圧 (Vdc) Leakage Current Capacitance Rated Voltage | | | | | | | | | | | | | | | |
| 損失角の正接 (tan δ) Dissipation Factor (MAX) | <table><tr><td>定格電圧 (Vdc) Rated Voltage</td><td>400</td><td>420～500</td></tr><tr><td>tan δ</td><td>0.20</td><td>0.25</td></tr></table> (20℃, 120Hz) | 定格電圧 (Vdc) Rated Voltage | 400 | 420～500 | tan δ | 0.20 | 0.25 | | | | | | | | | |
| 定格電圧 (Vdc) Rated Voltage | 400 | 420～500 | | | | | | | | | | | | | | |
| tan δ | 0.20 | 0.25 | | | | | | | | | | | | | | |
| 耐久性 Endurance | 105℃中で右表の時間定格電圧(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 specified time at 105℃, the capacitors shall meet the following requirements. <table><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><td>ケースサイズ Case Size</td><td>時間(hrs) Time(hrs)</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><td>φ D ≤ 12.5</td><td>2000</td></tr><tr><td>漏れ電流 Leakage Current</td><td>規格値以下 Not more than the specified value.</td><td>φ D ≥ 14.5</td><td>L ≤ 25 L ≥ 30 2000 3000</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. | ケースサイズ Case Size | 時間(hrs) Time(hrs) | 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | φ D ≤ 12.5 | 2000 | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | φ D ≥ 14.5 | L ≤ 25 L ≥ 30 2000 3000 | | | |
| 静電容量変化率 Capacitance Change | 初期値の ±20% 以内 Within ±20% of the initial value. | ケースサイズ Case Size | 時間(hrs) Time(hrs) | | | | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の 200% 以下 Not more than 200% of the specified value. | φ D ≤ 12.5 | 2000 | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | φ D ≥ 14.5 | L ≤ 25 L ≥ 30 2000 3000 | | | | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX) | <table><tr><td>定格電圧 (Vdc) Rated Voltage</td><td>400</td><td>420</td><td>450</td><td>500</td></tr><tr><td>Z(-25℃)/Z(+20℃)</td><td>5</td><td>6</td><td>6</td><td>8</td></tr><tr><td>Z(-40℃)/Z(+20℃)</td><td>6</td><td>10</td><td>10</td><td>12</td></tr></table> (120Hz) | 定格電圧 (Vdc) Rated Voltage | 400 | 420 | 450 | 500 | Z(-25℃)/Z(+20℃) | 5 | 6 | 6 | 8 | Z(-40℃)/Z(+20℃) | 6 | 10 | 10 | 12 |
| 定格電圧 (Vdc) Rated Voltage | 400 | 420 | 450 | 500 | | | | | | | | | | | | |
| Z(-25℃)/Z(+20℃) | 5 | 6 | 6 | 8 | | | | | | | | | | | | |
| Z(-40℃)/Z(+20℃) | 6 | 10 | 10 | 12 | | | | | | | | | | | | |

◆呼称方法／PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | HXW | □□□□□ | M | □□□ | □□ | 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 | リード加工記号 Lead Forming | ケースサイズ Case Size |

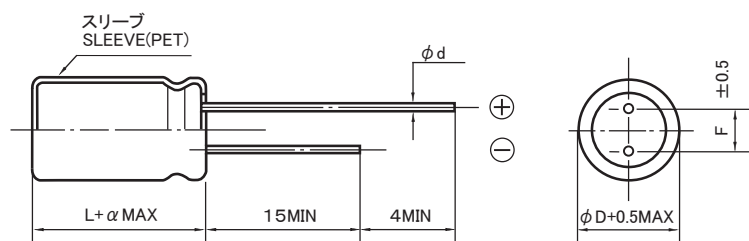
◆リップル電流補正係数／ MULTIPLIER FOR RIPPLE CURRENT

| | | | | | |
|----------------------|--------|------|------|------|-------|
| 周波数(Hz) Frequency | 60(50) | 120 | 500 | 1k | 10k ≤ |
| 係数 Coefficient | 0.80 | 1.00 | 1.25 | 1.40 | 1.50 |

◆副記号／OPTION

EFR: PETスリーブ PET Sleeve

◆寸法図／DIMENSIONS



| | | | | | |
|----------|------|------|------|----|----|
| | (mm) | | | | |
| ϕ D | 10 | 12.5 | 14.5 | 16 | 18 |
| ϕ d | 0.6 | | 0.8 | | |
| F | 5.0 | | 7.5 | | |
| α | 2.0 | | | | |

◆標準品一覧表／STANDARD SIZE

Rated Ripple Current (A r.m.s./105°C, 120Hz)

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size φ D×L (mm) | 定格リプル 電流 RatedRipple Current |
|--------------------------------|------------------------------|----------------------------|---------------------------------------|
| 400 | 39 | 12.5×20 | 0.41 |
| | 47 | 10×30 | 0.47 |
| | 56 | 10×35 | 0.54 |
| | 56 | 10×40 | 0.57 |
| | 56 | 12.5×25 | 0.53 |
| | 56 | 14.5×20 | 0.52 |
| | 68 | 10×45 | 0.65 |
| | 68 | 12.5×30 | 0.61 |
| | 68 | 14.5×25 | 0.62 |
| | 68 | 16×20 | 0.59 |
| | 82 | 10×50 | 0.73 |
| | 82 | 10×55 | 0.75 |
| | 82 | 10×60 | 0.78 |
| | 82 | 12.5×35 | 0.70 |
| | 82 | 14.5×30 | 0.71 |
| | 82 | 18×20 | 0.67 |
| | 100 | 12.5×40 | 0.80 |
| | 100 | 12.5×45 | 0.84 |
| | 100 | 14.5×35 | 0.82 |
| | 100 | 16×25 | 0.74 |
| | 120 | 12.5×50 | 0.95 |
| | 120 | 14.5×40 | 0.93 |
| | 120 | 16×30 | 0.87 |
| | 120 | 18×25 | 0.85 |
| | 150 | 14.5×45 | 1.07 |
| | 150 | 14.5×50 | 1.11 |
| | 150 | 16×35 | 1.00 |
| | 150 | 16×40 | 1.07 |
| | 150 | 18×30 | 1.00 |
| | 180 | 16×45 | 1.20 |
| | 180 | 18×35 | 1.14 |
| | 220 | 16×50 | 1.34 |
| | 220 | 18×40 | 1.30 |
| | 220 | 18×45 | 1.36 |
| | 270 | 18×50 | 1.53 |

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size φ D×L (mm) | 定格リプル 電流 RatedRipple Current |
|--------------------------------|------------------------------|----------------------------|---------------------------------------|
| 420 | 39 | 10X30 | 0.40 |
| | 39 | 12.5X20 | 0.38 |
| | 47 | 10X35 | 0.46 |
| | 47 | 12.5X25 | 0.45 |
| | 47 | 14.5X20 | 0.45 |
| | 56 | 10X40 | 0.52 |
| | 56 | 16X20 | 0.50 |
| | 68 | 10X45 | 0.60 |
| | 68 | 10X50 | 0.62 |
| | 68 | 12.5X30 | 0.57 |
| | 68 | 14.5X25 | 0.57 |
| | 82 | 10X55 | 0.70 |
| | 82 | 10X60 | 0.71 |
| | 82 | 12.5X35 | 0.64 |
| | 82 | 12.5X40 | 0.68 |
| | 82 | 14.5X30 | 0.66 |
| | 82 | 16X25 | 0.64 |
| | 82 | 18X20 | 0.62 |
| | 100 | 12.5X45 | 0.78 |
| | 100 | 14.5X35 | 0.76 |
| | 100 | 16X30 | 0.75 |
| | 120 | 12.5X50 | 0.86 |
| | 120 | 14.5X40 | 0.86 |
| | 120 | 14.5X45 | 0.90 |
| | 120 | 16X35 | 0.85 |
| | 120 | 18X25 | 0.78 |
| | 150 | 14.5X50 | 1.03 |
| | 150 | 16X40 | 0.99 |
| | 150 | 18X30 | 0.92 |
| | 180 | 16X45 | 1.11 |
| | 180 | 16X50 | 1.15 |
| | 180 | 18X35 | 1.05 |
| | 180 | 18X40 | 1.11 |
| | 220 | 18X45 | 1.26 |
| | 270 | 18X50 | 1.40 |

◆標準品一覧表／STANDARD SIZE

Rated Ripple Current(A r.m.s./105°C, 120Hz)

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ DxL (mm) | 定格リプル 電流 RatedRipple Current |
|--------------------------------|-----------------------------------|---------------------------------|---------------------------------------|
| 450 | 33 | 12.5×20 | 0.36 |
| | 39 | 10×30 | 0.40 |
| | 47 | 10×35 | 0.46 |
| | 47 | 12.5×25 | 0.45 |
| | 47 | 14.5×20 | 0.44 |
| | 56 | 10×40 | 0.51 |
| | 56 | 10×45 | 0.55 |
| | 56 | 12.5×30 | 0.52 |
| | 56 | 14.5×25 | 0.52 |
| | 56 | 16×20 | 0.50 |
| | 68 | 10×50 | 0.62 |
| | 68 | 10×55 | 0.64 |
| | 68 | 12.5×35 | 0.60 |
| | 68 | 18×20 | 0.57 |
| | 82 | 10×60 | 0.71 |
| | 82 | 12.5×40 | 0.68 |
| | 82 | 12.5×45 | 0.71 |
| | 82 | 14.5×30 | 0.66 |
| | 82 | 16×25 | 0.64 |
| | 100 | 12.5×50 | 0.81 |
| | 100 | 14.5×35 | 0.75 |
| | 100 | 14.5×40 | 0.79 |
| | 100 | 16×30 | 0.75 |
| | 100 | 18×25 | 0.73 |
| | 120 | 14.5×45 | 0.90 |
| | 120 | 14.5×50 | 0.93 |
| | 120 | 16×35 | 0.86 |
| | 120 | 18×30 | 0.84 |
| | 150 | 16×40 | 0.97 |
| | 150 | 16×45 | 1.03 |
| | 150 | 18×35 | 0.98 |
| | 180 | 16×50 | 1.15 |
| | 180 | 18×40 | 1.11 |
| | 220 | 18×45 | 1.24 |
| | 220 | 18×50 | 1.30 |

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ DxL (mm) | 定格リプル 電流 RatedRipple Current |
|--------------------------------|-----------------------------------|---------------------------------|---------------------------------------|
| 500 | 22 | 12.5×20 | 0.26 |
| | 27 | 12.5×25 | 0.33 |
| | 27 | 14.5×20 | 0.33 |
| | 33 | 14.5×25 | 0.38 |
| | 33 | 16×20 | 0.37 |
| | 33 | 12.5×30 | 0.38 |
| | 39 | 12.5×35 | 0.44 |
| | 47 | 12.5×40 | 0.50 |
| | 47 | 14.5×30 | 0.48 |
| | 47 | 16×25 | 0.48 |
| | 47 | 18×20 | 0.45 |
| | 56 | 12.5×45 | 0.57 |
| | 56 | 12.5×50 | 0.58 |
| | 56 | 14.5×35 | 0.56 |
| | 56 | 16×30 | 0.55 |
| | 56 | 18×25 | 0.54 |
| | 68 | 14.5×40 | 0.63 |
| | 68 | 14.5×45 | 0.71 |
| | 68 | 16×35 | 0.62 |
| | 68 | 18×30 | 0.68 |
| | 82 | 14.5×50 | 0.74 |
| | 82 | 16×40 | 0.71 |
| | 82 | 16×45 | 0.81 |
| | 82 | 18×35 | 0.78 |
| | 100 | 16×50 | 0.83 |
| | 100 | 18×40 | 0.88 |
| | 120 | 18×45 | 0.92 |
| | 120 | 18×50 | 0.95 |