

QXW series

105°C 2000時間 小形化品, -40°C対応
105°C 2000hours, Miniaturized, Temp. Range : -40~+105°C



RoHS
compliance

◆規格表／SPECIFICATIONS

| 項目 Item | 特性 Characteristics | | | | | | | | | | | |
|--|--|-------------|---------------|--|-------------------------------|---|------------------------------|--|-------------------------|---|------|---|
| カテゴリ温度範囲 Category Temperature Range | -40~+105°C | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 200~450Vdc | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | $\pm 20\%$ (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>200 400</td> <td>420, 450</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.15</td> <td>0.20</td> <td></td> </tr> </table> | | | | 定格電圧 (Vdc) Rated Voltage | 200 400 | 420, 450 | (20°C, 120Hz) | tan δ | 0.15 | 0.20 | |
| 定格電圧 (Vdc) Rated Voltage | 200 400 | 420, 450 | (20°C, 120Hz) | | | | | | | | | |
| tan δ | 0.15 | 0.20 | | | | | | | | | | |
| 耐久性 Endurance | 105°Cで2000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 2000 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 $\pm 20\%$ 以内 Within $\pm 20\%$ 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 $\pm 20\%$ 以内 Within $\pm 20\%$ 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. | | |
| 静電容量変化率 Capacitance Change | 初期値の $\pm 20\%$ 以内 Within $\pm 20\%$ 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. | | | | | | | | | | | |
| 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</td> <td>400</td> <td>420, 450</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>5</td> <td>6</td> </tr> </table> | | | | 定格電圧 (Vdc) Rated Voltage | 200 | 400 | 420, 450 | Z(-25°C)/Z(+20°C) | 3 | 5 | 6 |
| 定格電圧 (Vdc) Rated Voltage | 200 | 400 | 420, 450 | | | | | | | | | |
| Z(-25°C)/Z(+20°C) | 3 | 5 | 6 | | | | | | | | | |

◆呼称方法／PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | QXW | □□□□□ | M | EFR | □□ | 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／

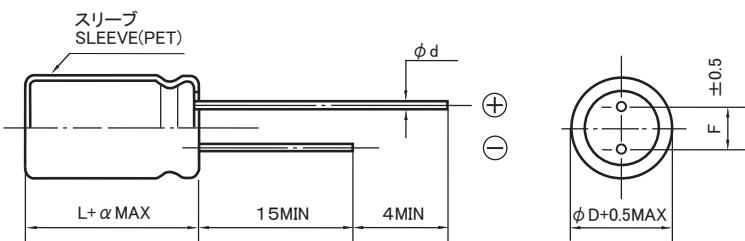
MULTIPLIER FOR RIPPLE CURRENT

| | | | | | |
|-----------------------|--------|------|------|------|------------|
| 周波数 (Hz) Frequency | 60(50) | 120 | 500 | 1k | 10k \leq |
| 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 | 8 | 10 | 12.5 | 14.5 | 16 | 18 |
| φ d | 0.6 | | | 0.8 | | |
| F | 3.5 | 5.0 | | 7.5 | | |
| α | | | 2.0 | | | |

◆標準品一覧表／STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μF) | 外形寸法 Size φ DxL (mm) | 定格リップル電流 Rated Ripple Current (Ar.m.s./105°C,120Hz) |
|--------------------------------|-----------------------------|----------------------------|---|
| 200 | 82 | 10×30 | 0.51 |
| | 100 | 10×35 | 0.60 |
| | 120 | 10×40 | 0.68 |
| | 150 | 12.5×30 | 0.73 |
| | 180 | 12.5×35 | 0.85 |
| | 220 | 12.5×40 | 0.97 |
| | 220 | 14.5×30 | 0.89 |
| | 270 | 14.5×35 | 1.04 |
| | 270 | 16×30 | 1.01 |
| | 330 | 16×35 | 1.17 |
| | 330 | 18×30 | 1.17 |
| | 390 | 16×40 | 1.33 |
| | 390 | 18×35 | 1.33 |
| | 470 | 18×40 | 1.53 |
| | 560 | 18×45 | 1.73 |
| 400 | 18 | 8×25 | 0.19 |
| | 22 | 8×30 | 0.22 |
| | 27 | 8×35 | 0.25 |
| | 33 | 8×45 | 0.33 |
| | 33 | 10×30 | 0.33 |
| | 39 | 8×50 | 0.35 |
| | 39 | 10×35 | 0.37 |
| | 47 | 10×40 | 0.43 |
| | 56 | 10×45 | 0.48 |
| | 56 | 12.5×30 | 0.47 |
| | 68 | 12.5×35 | 0.54 |
| | 82 | 12.5×40 | 0.62 |
| | 82 | 14.5×31.5 | 0.61 |
| | 100 | 12.5×50 | 0.73 |
| | 100 | 14.5×35 | 0.70 |
| | 100 | 16×31.5 | 0.71 |
| | 120 | 14.5×40 | 0.79 |
| | 120 | 16×35 | 0.80 |
| | 150 | 14.5×50 | 0.94 |
| | 150 | 16×40 | 0.92 |
| | 150 | 18×31.5 | 0.89 |
| | 180 | 16×50 | 1.08 |
| | 180 | 18×40 | 1.06 |
| | 220 | 18×45 | 1.20 |

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μF) | 外形寸法 Size φ DxL (mm) | 定格リップル電流 Rated Ripple Current (Ar.m.s./105°C,120Hz) |
|--------------------------------|-----------------------------|----------------------------|---|
| 420 | 15 | 8×25 | 0.12 |
| | 18 | 8×30 | 0.14 |
| | 22 | 8×40 | 0.22 |
| | 27 | 8×45 | 0.26 |
| | 33 | 10×30 | 0.32 |
| | 39 | 10×35 | 0.36 |
| | 47 | 10×40 | 0.41 |
| | 56 | 10×50 | 0.49 |
| | 56 | 12.5×30 | 0.46 |
| | 68 | 12.5×35 | 0.53 |
| | 82 | 12.5×45 | 0.63 |
| | 82 | 14.5×31.5 | 0.60 |
| | 100 | 12.5×50 | 0.71 |
| | 100 | 14.5×40 | 0.72 |
| | 100 | 16×31.5 | 0.69 |
| | 120 | 14.5×45 | 0.81 |
| | 120 | 16×35 | 0.78 |
| 450 | 120 | 18×31.5 | 0.80 |
| | 150 | 16×45 | 0.94 |
| | 150 | 18×35 | 0.92 |
| | 180 | 16×50 | 1.05 |
| | 180 | 18×40 | 1.04 |
| | 220 | 18×50 | 1.22 |
| | 12 | 8×25 | 0.15 |
| | 15 | 8×30 | 0.17 |
| | 18 | 8×35 | 0.19 |
| | 22 | 8×45 | 0.23 |
| | 27 | 10×30 | 0.30 |
| | 33 | 10×35 | 0.34 |
| | 39 | 10×40 | 0.39 |
| | 47 | 10×45 | 0.44 |
| | 47 | 12.5×30 | 0.43 |
| | 56 | 12.5×35 | 0.49 |
| | 68 | 12.5×40 | 0.56 |
| | 68 | 14.5×31.5 | 0.56 |
| | 82 | 12.5×45 | 0.63 |
| | 82 | 14.5×35 | 0.63 |
| | 82 | 16×31.5 | 0.64 |
| | 100 | 14.5×40 | 0.72 |
| | 100 | 16×35 | 0.73 |
| | 120 | 14.5×50 | 0.85 |
| | 120 | 16×40 | 0.82 |
| | 120 | 18×31.5 | 0.80 |
| | 150 | 16×50 | 0.98 |
| | 150 | 18×40 | 0.97 |
| | 180 | 18×45 | 1.09 |
| | 220 | 18×50 | 1.22 |