

YXF シリーズ
SERIES

105°C 長寿命品
105°C Long Life

・105°C 4000~10000時間品。
Load Life : 105°C 4000~10000 hours.

RoHS
compliance



◆規格表 / SPECIFICATIONS

| 項目 Items | 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 | 6.3~100Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20%(20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current(MAX) | I=0.01CV又は3µAのいずれか大なる値以下(定格電圧印加2分後) I=0.01CV or 3µA whichever is greater. (After 2 minutes) I=漏れ電流(µA) Leakage Current C=静電容量(µF) Capacitance V=定格電圧(Vdc) Rated Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接(tanδ) Dissipation Factor(MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</td> <td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td> <td>(20°C,120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td> <td></td> </tr> </table> <p>1000µFを越えるものは1000µF増す毎に上表の値に0.02を加えた値とする。 When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (20°C,120Hz) | tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | |
| 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | | |
| tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | |
| 耐久性 Endurance | <p>105°C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°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±25%以内 Within ±25% of the initial value.</td> <td rowspan="3"> <table border="1"> <tr> <td>ケースサイズ Case Size</td> <td colspan="2">時間(hrs) Life Time</td> </tr> <tr> <td></td> <td>6.3~10Vdc</td> <td>16~100Vdc</td> </tr> <tr> <td>φD≤6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>φD=8,10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>φD≥12.5</td> <td>8000</td> <td>10000</td> </tr> </table> </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±25%以内 Within ±25% of the initial value. | <table border="1"> <tr> <td>ケースサイズ Case Size</td> <td colspan="2">時間(hrs) Life Time</td> </tr> <tr> <td></td> <td>6.3~10Vdc</td> <td>16~100Vdc</td> </tr> <tr> <td>φD≤6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>φD=8,10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>φD≥12.5</td> <td>8000</td> <td>10000</td> </tr> </table> | ケースサイズ Case Size | 時間(hrs) Life Time | | | 6.3~10Vdc | 16~100Vdc | φD≤6.3 | 4000 | 5000 | φD=8,10 | 6000 | 7000 | φD≥12.5 | 8000 | 10000 | 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±25%以内 Within ±25% of the initial value. | <table border="1"> <tr> <td>ケースサイズ Case Size</td> <td colspan="2">時間(hrs) Life Time</td> </tr> <tr> <td></td> <td>6.3~10Vdc</td> <td>16~100Vdc</td> </tr> <tr> <td>φD≤6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>φD=8,10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>φD≥12.5</td> <td>8000</td> <td>10000</td> </tr> </table> | ケースサイズ Case Size | | 時間(hrs) Life Time | | | 6.3~10Vdc | 16~100Vdc | φD≤6.3 | 4000 | 5000 | φD=8,10 | 6000 | 7000 | φD≥12.5 | 8000 | 10000 | | | | | | | | | | | | | |
| ケースサイズ Case Size | 時間(hrs) Life Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6.3~10Vdc | | 16~100Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φD≤6.3 | 4000 | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φD=8,10 | 6000 | 7000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φD≥12.5 | 8000 | 10000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td> <td></td> </tr> </table> | 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (120Hz) | Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | | Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | |
| 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (120Hz) | | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |

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

| 周波数(Hz) Frequency | 120 | 1k | 10k | 100k≤ |
|----------------------|------|------|------|-------|
| 1uF | 0.35 | 0.60 | 0.80 | 1.00 |
| 2.2~10uF | 0.42 | 0.60 | 0.80 | 1.00 |
| 22~33uF | 0.55 | 0.75 | 0.90 | 1.00 |
| 47~330uF | 0.70 | 0.85 | 0.95 | 1.00 |
| 470~1000uF | 0.75 | 0.90 | 0.98 | 1.00 |
| 2200~15000uF | 0.80 | 0.95 | 1.00 | 1.00 |

◆寸法図 / DIMENSIONS (mm)



◆呼称方法 / PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | YXF | □□□□□ | M | □□□ | □□ | DXL |
| 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 |

◆副記号 / OPTION

| | |
|--------------------|---------|
| | 記号 Code |
| PETスリーブ PET Sleeve | EFC |

◆標準品一覧表 / STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ D×L(mm) | 定格リップル電流 Rated ripple current (mA r.m.s./105°C, 100kHz) | インピーダンス(Ω MAX) Impedance | |
|--------------------------------|-----------------------------------|--------------------------------|---|-------------------------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 6.3 | 100 | 5×11 | 150 | 0.90 | 3.6 |
| | 220 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 330 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 470 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 1000 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 2200 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 3300 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 4700 | 16×25 | 1850 | 0.034 | 0.096 |
| | 6800 | 16×25 | 1850 | 0.034 | 0.096 |
| | 10000 | 16×31.5 | 2000 | 0.029 | 0.087 |
| 15000 | 18×35.5 | 2200 | 0.025 | 0.058 | |
| 10 | 100 | 5×11 | 150 | 0.90 | 3.6 |
| | 220 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 330 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 470 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 1000 | 10×16 | 770 | 0.12 | 0.46 |
| | 2200 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 3300 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 4700 | 16×25 | 1850 | 0.034 | 0.096 |
| | 6800 | 16×31.5 | 2000 | 0.029 | 0.087 |
| | 10000 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 16 | 47 | 5×11 | 150 | 0.90 | 3.6 |
| | 100 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 220 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 330 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 470 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 1000 | 10×20 | 1050 | 0.078 | 0.30 |
| | 2200 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 3300 | 16×25 | 1850 | 0.034 | 0.096 |
| | 4700 | 16×31.5 | 2000 | 0.029 | 0.087 |
| | 6800 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 25 | 33 | 5×11 | 150 | 0.90 | 3.6 |
| | 47 | 5×11 | 150 | 0.90 | 3.6 |
| | 100 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 220 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 330 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 470 | 10×16 | 770 | 0.12 | 0.46 |
| | 1000 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 2200 | 16×25 | 1850 | 0.034 | 0.096 |
| | 3300 | 16×31.5 | 2000 | 0.029 | 0.087 |
| | 4700 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 35 | 33 | 5×11 | 150 | 0.90 | 3.6 |
| | 47 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 100 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 220 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 330 | 10×16 | 770 | 0.12 | 0.46 |
| | 470 | 10×20 | 1050 | 0.078 | 0.30 |
| | 1000 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 2200 | 16×31.5 | 2000 | 0.029 | 0.087 |
| 3300 | 18×35.5 | 2200 | 0.025 | 0.058 | |

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ D×L(mm) | 定格リップル電流 Rated ripple current (mA r.m.s./105°C, 100kHz) | インピーダンス(Ω MAX) Impedance | |
|--------------------------------|-----------------------------------|--------------------------------|---|-------------------------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 50 | 1 | 5×11 | 30 | 4.0 | 8.0 |
| | 2.2 | 5×11 | 43 | 2.5 | 6.0 |
| | 3.3 | 5×11 | 53 | 2.2 | 5.6 |
| | 4.7 | 5×11 | 88 | 1.9 | 5.0 |
| | 10 | 5×11 | 100 | 1.5 | 4.0 |
| | 22 | 5×11 | 150 | 0.90 | 3.6 |
| | 33 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 47 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 100 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 220 | 10×16 | 770 | 0.12 | 0.46 |
| | 330 | 10×20 | 1050 | 0.078 | 0.30 |
| | 470 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 1000 | 16×25 | 1850 | 0.034 | 0.096 |
| | 2200 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 63 | 10 | 5×11 | 87 | 2.3 | 9.3 |
| | 22 | 6.3×11 | 140 | 1.3 | 5.2 |
| | 33 | 6.3×11 | 140 | 1.2 | 5.0 |
| | 47 | 8×11.5 | 210 | 0.63 | 2.8 |
| | 100 | 10×12.5 | 300 | 0.43 | 1.8 |
| | 220 | 10×20 | 520 | 0.21 | 0.84 |
| | 330 | 12.5×20 | 660 | 0.16 | 0.64 |
| | 470 | 12.5×25 | 750 | 0.12 | 0.45 |
| | 1000 | 16×31.5 | 1390 | 0.054 | 0.20 |
| | 100 | 1 | 5×11 | 20 | 4.5 |
| 2.2 | | 5×11 | 30 | 3.0 | 13.0 |
| 3.3 | | 5×11 | 40 | 2.7 | 11.0 |
| 4.7 | | 5×11 | 65 | 2.5 | 10.0 |
| 10 | | 6.3×11 | 140 | 1.2 | 5.0 |
| 22 | | 8×11.5 | 160 | 0.63 | 2.8 |
| 33 | | 10×12.5 | 230 | 0.43 | 1.8 |
| 47 | | 10×16 | 290 | 0.31 | 1.5 |
| 100 | | 12.5×20 | 430 | 0.16 | 0.64 |
| 220 | | 16×25 | 900 | 0.073 | 0.27 |
| 330 | | 16×25 | 900 | 0.073 | 0.27 |