

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



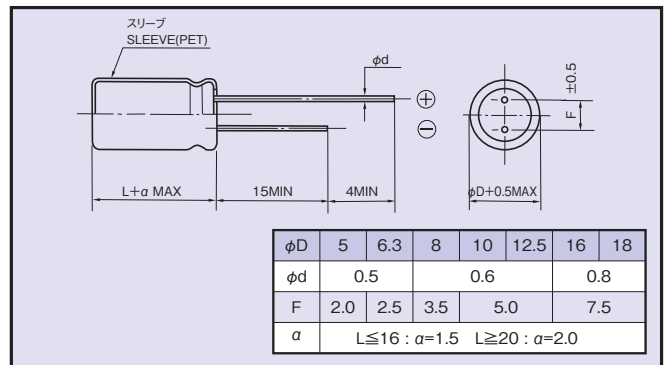
◆規格表 / SPECIFICATIONS

| 項目 Items  | 特性 Characteristics   |                               |   |                     |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
|---|--|-------------------------------|---|---------------------|----------------------|------|------------------------------|--|--------------|-----------|--------------|-------------------------|---|---------|------|------|------|------|---------|------|------|------------------|---|---|------|-------|---|---|---|---|--|
| カテゴリ温度範囲<br>Category Temperature Range                                  | -40~+105°C   |                               |   |                     |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 定格電圧範囲<br>Rated Voltage Range   | 6.3~100Vdc   |                               |   |                     |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 静電容量許容差<br>Capacitance Tolerance  | ±20%(20°C,120Hz)   |                               |   |                     |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 漏れ電流<br>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)<br>I=0.01CV or 3µA whichever is greater. (After 2 minutes)<br><br>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)<br>Dissipation Factor(MAX)                                 | <table border="1"> <tr> <td>定格電圧(Vdc)<br/>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。<br/>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)<br>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)<br>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<br>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。<br/>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<br/>Capacitance Change</td> <td>初期値の±25%以内<br/>Within ±25% of the initial value.</td> <td>ケースサイズ<br/>Case Size</td> <td colspan="2">時間(hrs)<br/>Life Time</td> </tr> <tr> <td>損失角の正接<br/>Dissipation Factor</td> <td>規格値の200%以下<br/>Not more than 200% of the specified value.</td> <td>φD≤6.3</td> <td>6.3~10Vdc</td> <td>16~100Vdc</td> </tr> <tr> <td>漏れ電流<br/>Leakage Current</td> <td>規格値以下<br/>Not more than the specified value.</td> <td>φD=8,10</td> <td>4000</td> <td>5000</td> </tr> <tr> <td></td> <td></td> <td>φD≥12.5</td> <td>6000</td> <td>7000</td> </tr> <tr> <td></td> <td></td> <td></td> <td>8000</td> <td>10000</td> </tr> </table> | 静電容量変化率<br>Capacitance Change | 初期値の±25%以内<br>Within ±25% of the initial value. | ケースサイズ<br>Case Size | 時間(hrs)<br>Life Time |      | 損失角の正接<br>Dissipation Factor | 規格値の200%以下<br>Not more than 200% of the specified value. | φD≤6.3       | 6.3~10Vdc | 16~100Vdc    | 漏れ電流<br>Leakage Current | 規格値以下<br>Not more than the specified value. | φD=8,10 | 4000 | 5000 |      |      | φD≥12.5 | 6000 | 7000 |                  |   |   | 8000 | 10000 |   |   |   |   |  |
| 静電容量変化率<br>Capacitance Change   | 初期値の±25%以内<br>Within ±25% of the initial value.  | ケースサイズ<br>Case Size           | 時間(hrs)<br>Life Time                            |                     |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 損失角の正接<br>Dissipation Factor  | 規格値の200%以下<br>Not more than 200% of the specified value.   | φD≤6.3                        | 6.3~10Vdc                                       | 16~100Vdc           |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 漏れ電流<br>Leakage Current   | 規格値以下<br>Not more than the specified value.  | φD=8,10                       | 4000  | 5000                |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
|   |  | φD≥12.5                       | 6000  | 7000                |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
|   |  |                               | 8000  | 10000               |                      |      |                              |  |              |           |              |                         |   |         |      |      |      |      |         |      |      |                  |   |   |      |       |   |   |   |   |  |
| 低温特性<br>Low Temperature Stability<br>(インピーダンス比)<br>Impedance Ratio(MAX) | <table border="1"> <tr> <td>定格電圧(Vdc)<br/>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)<br>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)<br>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)<br>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<br>Rated Voltage | シリーズ名<br>Series | 静電容量<br>Capacitance | 静電容量許容差<br>Capacitance Tolerance | 副記号<br>Option | リード加工記号<br>Lead Forming | ケースサイズ<br>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<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D×L(mm) | 定格リップル電流<br>Rated ripple current<br>(mA r.m.s./105°C, 100kHz) | インピーダンス( $\Omega$ MAX)<br>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<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D×L(mm) | 定格リップル電流<br>Rated ripple current<br>(mA r.m.s./105°C, 100kHz) | インピーダンス( $\Omega$ MAX)<br>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          |