

KXF シリーズ  
SERIES

105°C 高さ20mm品  
105°C 20mm Height

・105°C 3000時間。  
Load Life : 105°C 3000 hours.

RoHS  
compliance



◆規格表／SPECIFICATIONS

| 項 目<br>Items                                                               | 特 性<br>Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------|----------------------------|---------------------------------------------|---------|----|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| カ テ ゴ リ 温 度 範 囲<br>Category Temperature Range                              | -40~+105℃                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -25~+105℃  |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 定 格 電 圧 範 囲<br>Rated Voltage Range                                         | 10~100Vdc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 160~450Vdc |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 静 電 容 量 許 容 差<br>Capacitance Tolerance                                     | ±20% (20℃, 120Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 漏 れ 電 流<br>Leakage Current(MAX)                                            | I=3√CV (定格電圧印加5分後)<br>I=3√CV (After 5 minutes application of rated voltage)<br>I=漏れ電流(μA)                      C=静電容量(μF)                      V=定格電圧(Vdc)<br>Leakage Current                      Capacitance                      Rated Voltage                                                                                                                                                                                                                                                                                       |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 損 失 角 の 正 接 (tanδ)<br>Dissipation Factor(MAX)                              | <table><tr><td>定格電圧(Vdc)<br/>Rated Voltage</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160~450</td></tr><tr><td>tanδ</td><td>0.55</td><td>0.50</td><td>0.45</td><td>0.40</td><td>0.35</td><td>0.30</td><td>0.25</td><td>0.20</td><td>0.20</td></tr></table> (20℃, 120Hz)                                                                                                                                                                                                           |            | 定格電圧(Vdc)<br>Rated Voltage          | 10                                              | 16                                | 25                                                       | 35                         | 50                                          | 63      | 80 | 100            | 160~450 | tanδ | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.20 |
| 定格電圧(Vdc)<br>Rated Voltage                                                 | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16         | 25                                  | 35                                              | 50                                | 63                                                       | 80                         | 100                                         | 160~450 |    |                |         |      |      |      |      |      |      |      |      |      |      |
| tanδ                                                                       | 0.55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.50       | 0.45                                | 0.40                                            | 0.35                              | 0.30                                                     | 0.25                       | 0.20                                        | 0.20    |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 耐 久 性<br>Endurance                                                         | 105℃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。<br>After applying rated voltage with rated ripple current for 3000 hours at 105℃, the capacitors shall meet the following requirements. <table><tr><td>静 電 容 量 変 化 率<br/>Capacitance Change</td><td>初期値の±20%以内<br/>Within ±20% of the initial value.</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></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></tr></table> |            | 静 電 容 量 変 化 率<br>Capacitance Change | 初期値の±20%以内<br>Within ±20% of the initial value. | 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. | 漏 れ 電 流<br>Leakage Current | 規格値以下<br>Not more than the specified value. |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 静 電 容 量 変 化 率<br>Capacitance Change                                        | 初期値の±20%以内<br>Within ±20% of the initial value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 漏 れ 電 流<br>Leakage Current                                                 | 規格値以下<br>Not more than the specified value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                     |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| 低 温 特 性<br>Low Temperature Stability<br>(インピーダンス比)<br>Impedance Ratio(MAX) | <table><tr><td>定格電圧(Vdc)<br/>Rated Voltage</td><td>10~100</td><td>160~250</td><td>315~450</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>3</td><td>3</td><td>8</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>12</td><td>—</td><td>—</td></tr></table> (120Hz)                                                                                                                                                                                                                                                                                        |            | 定格電圧(Vdc)<br>Rated Voltage          | 10~100                                          | 160~250                           | 315~450                                                  | Z(-25℃)/Z(20℃)             | 3                                           | 3       | 8  | Z(-40℃)/Z(20℃) | 12      | —    | —    |      |      |      |      |      |      |      |      |
| 定格電圧(Vdc)<br>Rated Voltage                                                 | 10~100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 160~250    | 315~450                             |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| Z(-25℃)/Z(20℃)                                                             | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3          | 8                                   |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |
| Z(-40℃)/Z(20℃)                                                             | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | —          | —                                   |                                                 |                                   |                                                          |                            |                                             |         |    |                |         |      |      |      |      |      |      |      |      |      |      |

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

| 周波数(Hz)<br>Frequency | 60(50) | 120(100) | 300  | 500  | 1k   | 10k≤ |
|----------------------|--------|----------|------|------|------|------|
| 10~100Vdc            | 0.90   | 1.00     | 1.03 | 1.05 | 1.10 | 1.15 |
| 160~250Vdc           | 0.80   | 1.00     | 1.15 | 1.20 | 1.30 | 1.50 |
| 315~450Vdc           | 0.80   | 1.00     | 1.15 | 1.20 | 1.25 | 1.40 |

◆副記号／OPTION

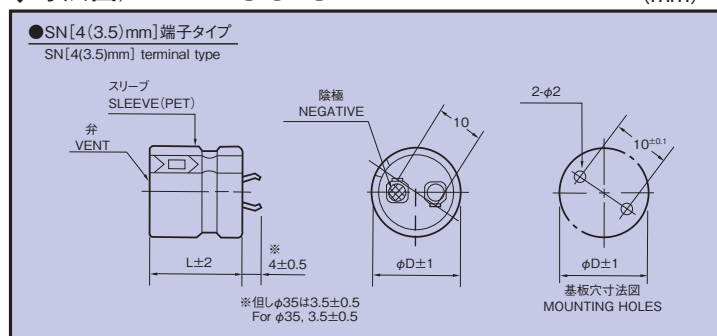
| 副記号 Code                                  |
|-------------------------------------------|
| PETスリーブ、底板なし PET Sleeve without plate EFC |

◆呼称方法／PART NUMBER

|                       |                 |                     |                                  |               |                       |                     |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-----------------------|---------------------|
| □□□                   | KXF             | □□□□□               | M                                | □□□           | SN                    | D×L                 |
| 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 | 端子記号<br>Terminal Code | ケースサイズ<br>Case Size |

◆寸法図／DIMENSIONS

(mm)



### ◆標準品一覧表 STANDARD SIZE

| Vdc<br>Cap(μF) | 10         | 16         | 25         | 35         | 50         | 63         | 80         | 100        |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 330            |            |            |            |            |            |            |            | 20×20 0.60 |
| 390            |            |            |            |            |            |            |            | 20×20 0.71 |
| 470            |            |            |            |            |            |            | 20×20 0.65 | 22×20 0.78 |
| 560            |            |            |            |            |            |            | 20×20 0.70 | 25×20 0.95 |
| 680            |            |            |            |            |            | 20×20 0.83 | 22×20 0.84 | 25×20 1.09 |
| 820            |            |            |            |            |            | 22×20 0.99 | 25×20 1.04 | 30×20 1.32 |
| 1000           |            |            |            |            | 20×20 0.87 | 22×20 1.10 | 25×20 1.19 |            |
| 1200           |            |            |            |            | 22×20 1.02 | 25×20 1.20 | 30×20 1.44 |            |
| 1500           |            |            |            | 20×20 0.80 | 25×20 1.15 | 30×20 1.47 |            |            |
| 1800           |            |            |            | 22×20 0.94 | 25×20 1.34 | 30×20 1.52 |            |            |
| 2200           |            |            | 20×20 0.98 | 22×20 1.04 | 30×20 1.60 |            |            |            |
| 2700           |            |            | 22×20 1.08 | 25×20 1.29 |            |            |            |            |
| 3300           |            | 20×20 1.06 | 22×20 1.29 | 30×20 1.45 |            |            |            |            |
| 3900           |            | 20×20 1.25 | 25×20 1.58 |            |            |            |            |            |
| 4700           | 20×20 0.98 | 22×20 1.38 | 25×20 1.61 |            |            |            |            |            |
| 5600           | 20×20 1.16 | 25×20 1.68 |            |            |            |            |            |            |
| 6800           | 22×20 1.31 | 25×20 1.80 |            |            |            |            |            |            |
| 8200           | 25×20 1.59 |            |            |            |            |            |            |            |
| 10000          | 25×20 1.77 |            |            |            |            |            |            |            |

| Vdc<br>Cap(μF) | 160        | 180        | 200        | 220        | 250        | 315        | 350        | 385        |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 39             |            |            |            |            |            |            |            | 20×20 0.35 |
| 47             |            |            |            |            |            |            | 20×20 0.38 | 20×20 0.38 |
| 56             |            |            |            |            |            | 20×20 0.41 | 20×20 0.40 | 22×20 0.42 |
| 68             |            |            |            |            |            | 22×20 0.48 | 22×20 0.45 | 25×20 0.50 |
| 82             |            |            |            |            |            | 22×20 0.51 | 25×20 0.54 | 25×20 0.52 |
| 100            |            |            |            |            |            | 25×20 0.57 | 25×20 0.57 | 30×20 0.61 |
| 120            |            |            |            |            | 20×20 0.65 | 30×20 0.65 | 30×20 0.65 | 30×20 0.64 |
| 150            |            |            |            | 20×20 0.70 | 22×20 0.74 | 30×20 0.70 | 35×20 0.78 | 35×20 0.80 |
| 180            |            | 20×20 0.80 | 20×20 0.80 | 22×20 0.80 | 22×20 0.77 | 35×20 0.85 | 35×20 0.85 |            |
| 220            | 20×20 0.81 | 22×20 0.90 | 22×20 0.87 | 25×20 0.85 | 25×20 0.95 | 35×20 0.90 |            |            |
| 270            | 22×20 0.98 | 22×20 0.95 | 25×20 0.95 | 25×20 1.02 | 30×20 1.00 |            |            |            |
| 330            | 25×20 1.02 | 25×20 1.15 | 25×20 1.15 | 30×20 1.12 | 30×20 1.16 |            |            |            |
| 390            | 25×20 1.25 | 25×20 1.20 | 30×20 1.20 | 30×20 1.25 | 35×20 1.25 |            |            |            |
| 470            | 30×20 1.30 | 30×20 1.36 | 30×20 1.41 | 35×20 1.45 |            |            |            |            |
| 560            | 30×20 1.46 | 30×20 1.43 | 35×20 1.43 |            |            |            |            |            |
| 680            | 35×20 1.51 | 35×20 1.51 |            |            |            |            |            |            |
| 820            | 35×20 1.55 |            |            |            |            |            |            |            |

| Vdc<br>Cap(μF) | 400        | 420        | 450        |
|----------------|------------|------------|------------|
| 39             |            |            | 20×20 0.36 |
| 47             | 20×20 0.39 | 20×20 0.38 | 20×20 0.41 |
| 56             | 20×20 0.40 | 22×20 0.45 | 22×20 0.43 |
| 68             | 22×20 0.49 | 22×20 0.48 | 25×20 0.50 |
| 82             | 25×20 0.55 | 25×20 0.53 | 25×20 0.53 |
| 100            | 25×20 0.60 | 30×20 0.58 | 30×20 0.61 |
| 120            | 30×20 0.75 | 30×20 0.70 | 30×20 0.70 |
| 150            | 30×20 0.80 | 35×20 0.80 | 35×20 0.80 |
| 180            | 35×20 0.85 |            |            |

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