

## JXF series

105℃ 6000～8000時間品 低インピーダンス品 広温度範囲品  
105℃ 6000～8000 hours. Low Impedance, Wide Temperature Range

AEC-Q200



### ◆規格表／SPECIFICATIONS

| 項目 Item                                                                  | 特性 Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|--|-------------------------------|-------------------------------------------------|----|----|----|----|----|-----|------------------------------|------------------------------------------------------------|------|------|------|------|------|------|-------------------------|---------------------------------------------|--|--|--|--|--|--|---------------------|----------------------|-------|------|---------|------|
| カテゴリ温度範囲<br>Category Temperature Range                                   | -55~+105℃                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 定格電圧範囲<br>Rated Voltage Range                                            | 16~100Vdc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 静電容量許容差<br>Capacitance Tolerance                                         | ±20%(20℃, 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>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(tan δ)<br>Dissipation Factor (MAX)                                | <table><tr><td>定格電圧 (Vdc)<br/>Rated Voltage</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td></tr><tr><td>tan δ</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.09</td><td>0.08</td></tr></table> (20℃, 120Hz)<br>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, tan δ shall be added 0.02 to the listed value with increase of every 1000μF.                                                                                                                                                                                                                                                                                                 |      |      |      |      |      |      |  | 定格電圧 (Vdc)<br>Rated Voltage   | 16                                              | 25 | 35 | 50 | 63 | 80 | 100 | tan δ                        | 0.16                                                       | 0.14 | 0.12 | 0.10 | 0.09 | 0.09 | 0.08 |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 定格電圧 (Vdc)<br>Rated Voltage                                              | 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 25   | 35   | 50   | 63   | 80   | 100  |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| tan δ                                                                    | 0.16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.14 | 0.12 | 0.10 | 0.09 | 0.09 | 0.08 |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 耐久性<br>Endurance                                                         | <p>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。<br/>After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements.</p> <table><tr><td>静電容量変化率<br/>Capacitance Change</td><td colspan="7">初期値の±30%以内<br/>Within ±30% of the initial value.</td></tr><tr><td>損失角の正接<br/>Dissipation Factor</td><td colspan="7">規格値の 300% 以下<br/>Not more than 300% of the specified value.</td></tr><tr><td>漏れ電流<br/>Leakage Current</td><td colspan="7">規格値以下<br/>Not more than the specified value.</td></tr></table> <table><tr><td>ケースサイズ<br/>Case Size</td><td>時間(hrs)<br/>Time(hrs)</td></tr><tr><td>φD≤10</td><td>6000</td></tr><tr><td>φD≥12.5</td><td>8000</td></tr></table> |      |      |      |      |      |      |  | 静電容量変化率<br>Capacitance Change | 初期値の±30%以内<br>Within ±30% of the initial value. |    |    |    |    |    |     | 損失角の正接<br>Dissipation Factor | 規格値の 300% 以下<br>Not more than 300% of the specified value. |      |      |      |      |      |      | 漏れ電流<br>Leakage Current | 規格値以下<br>Not more than the specified value. |  |  |  |  |  |  | ケースサイズ<br>Case Size | 時間(hrs)<br>Time(hrs) | φD≤10 | 6000 | φD≥12.5 | 8000 |
| 静電容量変化率<br>Capacitance Change                                            | 初期値の±30%以内<br>Within ±30% of the initial value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 損失角の正接<br>Dissipation Factor                                             | 規格値の 300% 以下<br>Not more than 300% of the specified value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 漏れ電流<br>Leakage Current                                                  | 規格値以下<br>Not more than the specified value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| ケースサイズ<br>Case Size                                                      | 時間(hrs)<br>Time(hrs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| φD≤10                                                                    | 6000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| φD≥12.5                                                                  | 8000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |      |      |      |      |      |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 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>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td></tr><tr><td>Z(-55℃)/Z(+20℃)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table> (120Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |      |      |      |      |  | 定格電圧 (Vdc)<br>Rated Voltage   | 16                                              | 25 | 35 | 50 | 63 | 80 | 100 | Z(-55℃)/Z(+20℃)              | 3                                                          | 3    | 3    | 3    | 3    | 3    | 3    |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| 定格電圧 (Vdc)<br>Rated Voltage                                              | 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 25   | 35   | 50   | 63   | 80   | 100  |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |
| Z(-55℃)/Z(+20℃)                                                          | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3    | 3    | 3    | 3    | 3    | 3    |  |                               |                                                 |    |    |    |    |    |     |                              |                                                            |      |      |      |      |      |      |                         |                                             |  |  |  |  |  |  |                     |                      |       |      |         |      |

### ◆呼称方法／PART NUMBER

|                       |                 |                     |                                  |               |                         |                     |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□                   | JXF             | □□□□□               | M                                | □□□           | □□                      | D x 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 | リード加工記号<br>Lead Forming | ケースサイズ<br>Case Size |

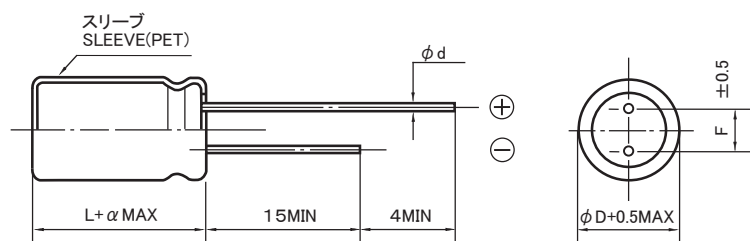
### ◆リップル電流補正係数／ MULTIPLIER FOR RIPPLE CURRENT

| 周波数 (Hz)<br>Frequency | 120          | 1k   | 10k  | 100k ≤ |
|-----------------------|--------------|------|------|--------|
| 係数<br>Coefficient     | 68～270μF     | 0.50 | 0.73 | 0.92   |
|                       | 300～680μF    | 0.55 | 0.77 | 0.94   |
|                       | 820～1800μF   | 0.60 | 0.80 | 0.96   |
|                       | 2200～10000μF | 0.70 | 0.85 | 0.98   |

### ◆副記号／OPTION

EFC : PETスリーブ PET Sleeve

◆寸法図／DIMENSIONS



|          |      |      |     |    |
|----------|------|------|-----|----|
|          | (mm) |      |     |    |
| $\phi$ D | 10   | 12.5 | 16  | 18 |
| $\phi$ d | 0.6  |      | 0.8 |    |
| F        | 5.0  |      | 7.5 |    |
| $\alpha$ | 2.0  |      |     |    |

◆標準品一覧表／STANDARD SIZE

Rated Ripple Current (mA r.m.s./105°C, 100kHz), Impedance (Ω MAX/100kHz)

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法 Size<br>φDxL (mm) | 定格リプル<br>電流<br>Rated Ripple | インピーダンス<br>(Ω MAX)<br>Impedance |       |
|--------------------------------|-----------------------------|------------------------|-----------------------------|---------------------------------|-------|
|                                |                             |                        |                             | 20°C                            | -10°C |
| 16                             | 1000                        | 10×16                  | 1180                        | 0.061                           | 0.122 |
|                                | 1500                        | 10×20                  | 1490                        | 0.045                           | 0.090 |
|                                | 1800                        | 10×25                  | 1710                        | 0.037                           | 0.074 |
|                                | 2200                        | 12.5×20                | 1780                        | 0.038                           | 0.076 |
|                                | 3300                        | 12.5×25                | 2170                        | 0.030                           | 0.060 |
|                                | 3900                        | 12.5×30                | 2540                        | 0.025                           | 0.050 |
|                                | 3900                        | 16×20                  | 2210                        | 0.028                           | 0.056 |
|                                | 5600                        | 16×25                  | 2620                        | 0.022                           | 0.044 |
|                                | 5600                        | 18×20                  | 2490                        | 0.028                           | 0.056 |
|                                | 6800                        | 16×30                  | 3060                        | 0.019                           | 0.038 |
|                                | 8200                        | 18×25                  | 2790                        | 0.020                           | 0.040 |
|                                | 10000                       | 18×30                  | 3240                        | 0.018                           | 0.036 |
| 25                             | 680                         | 10×16                  | 1180                        | 0.061                           | 0.122 |
|                                | 1000                        | 10×20                  | 1490                        | 0.045                           | 0.090 |
|                                | 1200                        | 10×25                  | 1710                        | 0.037                           | 0.074 |
|                                | 1500                        | 12.5×20                | 1780                        | 0.038                           | 0.076 |
|                                | 2200                        | 12.5×25                | 2170                        | 0.030                           | 0.060 |
|                                | 2700                        | 12.5×30                | 2540                        | 0.025                           | 0.050 |
|                                | 2700                        | 16×20                  | 2210                        | 0.028                           | 0.056 |
|                                | 3300                        | 18×20                  | 2490                        | 0.028                           | 0.056 |
|                                | 3900                        | 16×25                  | 2620                        | 0.022                           | 0.044 |
|                                | 4700                        | 16×30                  | 3060                        | 0.019                           | 0.038 |
|                                | 4700                        | 18×25                  | 2790                        | 0.020                           | 0.040 |
|                                | 5600                        | 18×30                  | 3240                        | 0.018                           | 0.036 |

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法 Size<br>φDxL (mm) | 定格リプル<br>電流<br>Rated Ripple | インピーダンス<br>(Ω MAX)<br>Impedance |       |
|--------------------------------|-----------------------------|------------------------|-----------------------------|---------------------------------|-------|
|                                |                             |                        |                             | 20°C                            | -10°C |
| 35                             | 470                         | 10×16                  | 1180                        | 0.061                           | 0.122 |
|                                | 680                         | 10×20                  | 1490                        | 0.045                           | 0.090 |
|                                | 820                         | 10×25                  | 1710                        | 0.037                           | 0.074 |
|                                | 1000                        | 12.5×20                | 1780                        | 0.038                           | 0.076 |
|                                | 1200                        | 12.5×25                | 2170                        | 0.030                           | 0.060 |
|                                | 1800                        | 12.5×30                | 2540                        | 0.025                           | 0.050 |
|                                | 1800                        | 16×20                  | 2210                        | 0.028                           | 0.056 |
|                                | 2200                        | 16×25                  | 2620                        | 0.022                           | 0.044 |
|                                | 2200                        | 18×20                  | 2490                        | 0.028                           | 0.056 |
|                                | 3300                        | 16×30                  | 3060                        | 0.019                           | 0.038 |
|                                | 3300                        | 18×25                  | 2790                        | 0.020                           | 0.040 |
|                                | 3900                        | 18×30                  | 3240                        | 0.018                           | 0.036 |
| 50                             | 180                         | 10×16                  | 850                         | 0.100                           | 0.200 |
|                                | 270                         | 10×20                  | 1050                        | 0.075                           | 0.150 |
|                                | 330                         | 10×25                  | 1250                        | 0.057                           | 0.114 |
|                                | 390                         | 12.5×20                | 1480                        | 0.059                           | 0.118 |
|                                | 560                         | 12.5×25                | 1840                        | 0.044                           | 0.088 |
|                                | 680                         | 12.5×30                | 2220                        | 0.036                           | 0.072 |
|                                | 820                         | 16×20                  | 1840                        | 0.044                           | 0.088 |
|                                | 1200                        | 16×25                  | 2240                        | 0.032                           | 0.064 |
|                                | 1200                        | 18×20                  | 2150                        | 0.041                           | 0.082 |
|                                | 1500                        | 16×30                  | 2700                        | 0.026                           | 0.052 |
|                                | 1500                        | 18×25                  | 2610                        | 0.029                           | 0.058 |
|                                | 2200                        | 18×30                  | 3000                        | 0.024                           | 0.048 |

### ◆標準品一覧表／STANDARD SIZE

Rated Ripple Current (mA r.m.s./105°C, 100kHz), Impedance (Ω MAX/100kHz)

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法 Size<br>φDxL (mm) | 定格リプル<br>電流<br>Rated Ripple | インピーダンス<br>(Ω MAX)<br>Impedance |       |
|--------------------------------|-----------------------------|------------------------|-----------------------------|---------------------------------|-------|
|                                |                             |                        |                             | 20°C                            | -10°C |
| 63                             | 120                         | 10×16                  | 600                         | 0.160                           | 0.32  |
|                                | 180                         | 10×20                  | 890                         | 0.120                           | 0.24  |
|                                | 220                         | 10×25                  | 1050                        | 0.090                           | 0.18  |
|                                | 330                         | 12.5×20                | 1290                        | 0.085                           | 0.17  |
|                                | 390                         | 12.5×25                | 1720                        | 0.066                           | 0.132 |
|                                | 470                         | 12.5×30                | 2090                        | 0.052                           | 0.104 |
|                                | 560                         | 16×20                  | 1770                        | 0.059                           | 0.118 |
|                                | 820                         | 16×25                  | 2160                        | 0.047                           | 0.094 |
|                                | 820                         | 18×20                  | 2290                        | 0.055                           | 0.110 |
|                                | 1000                        | 16×30                  | 2670                        | 0.037                           | 0.074 |
|                                | 1000                        | 18×25                  | 2590                        | 0.040                           | 0.080 |
|                                | 1500                        | 18×30                  | 2950                        | 0.032                           | 0.064 |
| 80                             | 100                         | 10×16                  | 550                         | 0.330                           | 0.81  |
|                                | 150                         | 10×20                  | 780                         | 0.240                           | 0.59  |
|                                | 180                         | 10×25                  | 970                         | 0.190                           | 0.47  |
|                                | 180                         | 12.5×20                | 1120                        | 0.165                           | 0.39  |
|                                | 270                         | 12.5×25                | 1420                        | 0.120                           | 0.28  |
|                                | 390                         | 12.5×30                | 1690                        | 0.097                           | 0.23  |
|                                | 390                         | 16×20                  | 1560                        | 0.110                           | 0.26  |
|                                | 470                         | 18×20                  | 1660                        | 0.090                           | 0.19  |
|                                | 560                         | 16×25                  | 1980                        | 0.081                           | 0.19  |
|                                | 680                         | 16×30                  | 2350                        | 0.064                           | 0.15  |
|                                | 680                         | 18×25                  | 2100                        | 0.070                           | 0.15  |
|                                | 820                         | 18×30                  | 2490                        | 0.058                           | 0.13  |

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法 Size<br>φDxL (mm) | 定格リプル<br>電流<br>Rated Ripple | インピーダンス<br>(Ω MAX)<br>Impedance |       |
|--------------------------------|-----------------------------|------------------------|-----------------------------|---------------------------------|-------|
|                                |                             |                        |                             | 20°C                            | -10°C |
| 100                            | 68                          | 10×16                  | 550                         | 0.330                           | 0.81  |
|                                | 100                         | 10×20                  | 780                         | 0.240                           | 0.59  |
|                                | 120                         | 10×25                  | 970                         | 0.190                           | 0.47  |
|                                | 120                         | 12.5×20                | 1120                        | 0.165                           | 0.39  |
|                                | 180                         | 12.5×25                | 1420                        | 0.120                           | 0.28  |
|                                | 220                         | 12.5×30                | 1690                        | 0.097                           | 0.23  |
|                                | 270                         | 16×20                  | 1560                        | 0.110                           | 0.26  |
|                                | 330                         | 16×25                  | 1980                        | 0.081                           | 0.19  |
|                                | 330                         | 18×20                  | 1660                        | 0.090                           | 0.19  |
|                                | 470                         | 16×30                  | 2350                        | 0.064                           | 0.15  |
|                                | 470                         | 18×25                  | 2100                        | 0.070                           | 0.15  |
|                                | 560                         | 18×30                  | 2490                        | 0.058                           | 0.13  |