

ZLJ series

105°C 6000~10000時間品 高リップル 長寿命 低インピーダンス品  
105°C 6000~10000 hours. High Ripple Current, Long Life, Low Impedance



◆規格表/SPECIFICATIONS

| 項目 Item  | 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  | 6.3~120Vdc   |                                  |   |                     |        |      |            |                   |       |      |               |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| 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>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 border="1"> <thead> <tr> <th>定格電圧 (Vdc)<br/>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>120</th> <th>(20°C, 120Hz)</th> </tr> </thead> <tbody> <tr> <td>tan δ</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>0.08</td> <td>0.08</td> <td></td> </tr> </tbody> </table> <p>1000µFを超えるものは1000µF増す毎に上記の表に0.02を加えた値とする。</p>  | 定格電圧 (Vdc)<br>Rated Voltage      | 6.3   | 10                  | 16     | 25   | 35         | 50                | 63    | 80   | 100           | 120    | (20°C, 120Hz) | tan δ             | 0.22   | 0.19                         | 0.16   | 0.14     | 0.12 | 0.10 | 0.09 | 0.08 | 0.08   | 0.08 |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| 定格電圧 (Vdc)<br>Rated Voltage  | 6.3  | 10                               | 16  | 25                  | 35     | 50   | 63         | 80                | 100   | 120  | (20°C, 120Hz) |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| tan δ  | 0.22   | 0.19                             | 0.16  | 0.14                | 0.12   | 0.10 | 0.09       | 0.08              | 0.08  | 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、下記規格を満足すること。<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"> <thead> <tr> <th rowspan="2">静電容量変化率<br/>Capacitance Change</th> <th rowspan="2">初期値の ±25%以内<br/>(6.3Vdc, 10Vdc: ±30%)<br/>Within ±25% of the initial value.</th> <th colspan="4">ケースサイズ<br/>Case Size</th> <th colspan="4">時間(hrs) Life Time</th> </tr> <tr> <th>6.3Vdc</th> <th>10~50Vdc</th> <th>63~100Vdc</th> <th>120Vdc</th> </tr> </thead> <tbody> <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>6000</td> <td>7000</td> <td>6000</td> <td>-</td> <td>8X11.5</td> <td>8000</td> <td>9000</td> <td>8000</td> <td>-</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>10X12.5</td> <td>9000</td> <td>9000</td> <td>9000</td> <td>-</td> <td>8X16, 8X20</td> <td>9000</td> <td>10000</td> <td>9000</td> <td>9000</td> </tr> <tr> <td></td> <td></td> <td>10X16, 10X20, 10X25<br/>φD ≥ 12.5</td> <td colspan="4">10000</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | 静電容量変化率<br>Capacitance Change    | 初期値の ±25%以内<br>(6.3Vdc, 10Vdc: ±30%)<br>Within ±25% of the initial value. | ケースサイズ<br>Case Size |        |      |            | 時間(hrs) Life Time |       |      |               | 6.3Vdc | 10~50Vdc      | 63~100Vdc         | 120Vdc | 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 | 6000 | 7000 | 6000 | -    | 8X11.5 | 8000 | 9000 | 8000              | - | 漏れ電流<br>Leakage Current | 規格値以下<br>Not more than the specified value. | 10X12.5 | 9000 | 9000 | 9000 | - | 8X16, 8X20 | 9000 | 10000 | 9000 | 9000 |  |  | 10X16, 10X20, 10X25<br>φD ≥ 12.5 | 10000 |  |  |  |  |  |  |  |  |
| 静電容量変化率<br>Capacitance Change  | 初期値の ±25%以内<br>(6.3Vdc, 10Vdc: ±30%)<br>Within ±25% of the initial value.  |                                  |   | ケースサイズ<br>Case Size |        |      |            | 時間(hrs) Life Time |       |      |               |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
|  |  | 6.3Vdc                           | 10~50Vdc  | 63~100Vdc           | 120Vdc |      |            |                   |       |      |               |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| 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                         | 6000  | 7000                | 6000   | -    | 8X11.5     | 8000              | 9000  | 8000 | -             |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| 漏れ電流<br>Leakage Current  | 規格値以下<br>Not more than the specified value.  | 10X12.5                          | 9000  | 9000                | 9000   | -    | 8X16, 8X20 | 9000              | 10000 | 9000 | 9000          |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
|  |  | 10X16, 10X20, 10X25<br>φD ≥ 12.5 | 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"> <thead> <tr> <th>定格電圧 (Vdc)<br/>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>120</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>4</td> <td></td> </tr> </tbody> </table>   | 定格電圧 (Vdc)<br>Rated Voltage      | 6.3   | 10                  | 16     | 25   | 35         | 50                | 63    | 80   | 100           | 120    | (120Hz)       | Z(-25°C)/Z(+20°C) | 2      | 2                            | 2  | 2        | 2    | 2    | 2    | 2    | 2      | 3    |      | Z(-40°C)/Z(+20°C) | 3 | 3                       | 3   | 3       | 3    | 3    | 3    | 3 | 3          | 4    |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| 定格電圧 (Vdc)<br>Rated Voltage  | 6.3  | 10                               | 16  | 25                  | 35     | 50   | 63         | 80                | 100   | 120  | (120Hz)       |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| Z(-25°C)/Z(+20°C)  | 2  | 2                                | 2   | 2                   | 2      | 2    | 2          | 2                 | 2     | 3    |               |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |
| Z(-40°C)/Z(+20°C)  | 3  | 3                                | 3   | 3                   | 3      | 3    | 3          | 3                 | 3     | 4    |               |        |               |                   |        |                              |  |          |      |      |      |      |        |      |      |                   |   |                         |   |         |      |      |      |   |            |      |       |      |      |  |  |                                  |       |  |  |  |  |  |  |  |  |

◆呼称方法/PART NUMBER

□□□ ZLJ □□□□□ M □□□ □□ D x L  
 定格電圧 シリーズ名 静電容量 静電容量許容差 副記号 リード加工記号 ケースサイズ  
 Rated Voltage Series Capacitance Capacitance Tolerance Option Lead Forming Case Size

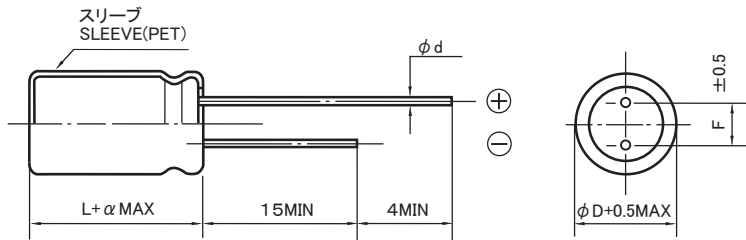
◆リップル電流補正係数/  
MULTIPLIER FOR RIPPLE CURRENT

| 周波数 (Hz)<br>Frequency | 120  | 1k   | 10k  | 100k ≤ |
|-----------------------|------|------|------|--------|
| 8.2~33 µF             | 0.42 | 0.70 | 0.90 | 1.00   |
| 47~270 µF             | 0.50 | 0.73 | 0.92 | 1.00   |
| 330~680 µF            | 0.55 | 0.77 | 0.94 | 1.00   |
| 820~1800 µF           | 0.60 | 0.80 | 0.96 | 1.00   |
| 2200~8200 µF          | 0.70 | 0.85 | 0.98 | 1.00   |

◆副記号/OPTION

Blank : 標準品  
 EFU : 低インピーダンス仕様品  
 Blank : Standard item  
 EFU : Low Impedance items

◆寸法図／DIMENSIONS



| φD | 5                | 6.3 | 8   | 10  | 12.5 | 16  | 18               |
|----|------------------|-----|-----|-----|------|-----|------------------|
| φd | 0.5              |     | 0.6 |     |      | 0.8 |                  |
| F  | 2.0              | 2.5 | 3.5 | 5.0 |      | 7.5 |                  |
| α  | L ≤ 16 : α = 1.5 |     |     |     |      |     | L ≥ 20 : α = 2.0 |

◆標準品一覧表／STANDARD SIZE

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法<br>Size φD×L<br>(mm) | 定格リップル<br>電流<br>Rated Ripple<br>Current | インピーダンス<br>(Ω MAX)<br>Impedance |               |
|--------------------------------|-----------------------------|---------------------------|---|---------------------------------|---------------|
|                                |                             |                           |   | 20°C, 100kHz                    | -10°C, 100kHz |
|                                |                             |                           |   | 6.3                             | 220           |
|                                | 470                         | 6.3×11                    | 540                                     | 0.17                            | 0.51          |
|                                | 820                         | 8×11.5                    | 945                                     | 0.075                           | 0.23          |
|                                | 1000                        | 8×16                      | 1250                                    | 0.059                           | 0.18          |
|                                | 1200                        | 10×12.5                   | 1330                                    | 0.053                           | 0.16          |
|                                | 1500                        | 8×20                      | 1500                                    | 0.041                           | 0.13          |
|                                | 1800                        | 10×16                     | 1760                                    | 0.038                           | 0.12          |
|                                | 2700                        | 10×20                     | 1960                                    | 0.028                           | 0.084         |
|                                | 3300                        | 10×25                     | 2250                                    | 0.024                           | 0.072         |
|                                | 3900                        | 12.5×20                   | 2480                                    | 0.025                           | 0.075         |
|                                | 4700                        | 12.5×25                   | 2900                                    | 0.019                           | 0.057         |
|                                | 5600                        | 12.5×30                   | 3450                                    | 0.018                           | 0.054         |
|                                | 6800                        | 12.5×35                   | 3570                                    | 0.016                           | 0.048         |
|                                | 6800                        | 16×20                     | 3250                                    | 0.021                           | 0.063         |
|                                | 8200                        | 16×25                     | 3630                                    | 0.017                           | 0.051         |
| 10                             | 150                         | 5×11                      | 450                                     | 0.40                            | 1.2           |
|                                | 330                         | 6.3×11                    | 700                                     | 0.17                            | 0.51          |
|                                | 560                         | 8×11.5                    | 1200                                    | 0.075                           | 0.23          |
|                                | 680                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 820                         | 10×12.5                   | 1700                                    | 0.053                           | 0.16          |
|                                | 1000                        | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 1200                        | 10×16                     | 2000                                    | 0.038                           | 0.12          |
|                                | 1800                        | 10×20                     | 2500                                    | 0.028                           | 0.084         |
|                                | 2200                        | 10×25                     | 2900                                    | 0.024                           | 0.072         |
|                                | 2700                        | 12.5×20                   | 2600                                    | 0.025                           | 0.075         |
|                                | 3300                        | 12.5×25                   | 3200                                    | 0.019                           | 0.057         |
|                                | 4700                        | 12.5×30                   | 3660                                    | 0.018                           | 0.054         |
|                                | 4700                        | 16×20                     | 3330                                    | 0.021                           | 0.063         |
|                                | 5600                        | 12.5×35                   | 4120                                    | 0.016                           | 0.048         |
|                                | 5600                        | 16×25                     | 3810                                    | 0.017                           | 0.051         |
| 16                             | 120                         | 5×11                      | 450                                     | 0.40                            | 1.2           |
|                                | 270                         | 6.3×11                    | 700                                     | 0.17                            | 0.51          |
|                                | 470                         | 8×11.5                    | 1200                                    | 0.075                           | 0.23          |
|                                | 560                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 680                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 680                         | 10×12.5                   | 1700                                    | 0.053                           | 0.16          |
|                                | 820                         | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 1000                        | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 1000                        | 10×16                     | 2000                                    | 0.038                           | 0.12          |
|                                | 1500                        | 10×20                     | 2500                                    | 0.028                           | 0.084         |
|                                | 1800                        | 10×25                     | 2900                                    | 0.024                           | 0.072         |
|                                | 2200                        | 12.5×20                   | 2600                                    | 0.025                           | 0.075         |
|                                | 2700                        | 12.5×25                   | 3200                                    | 0.019                           | 0.057         |
|                                | 3300                        | 12.5×30                   | 3660                                    | 0.018                           | 0.054         |
|                                | 3300                        | 16×20                     | 3330                                    | 0.021                           | 0.063         |
|                                | 3900                        | 12.5×35                   | 4120                                    | 0.016                           | 0.048         |
|                                | 4700                        | 16×25                     | 3810                                    | 0.017                           | 0.051         |

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

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法<br>Size φD×L<br>(mm) | 定格リップル<br>電流<br>Rated Ripple<br>Current | インピーダンス<br>(Ω MAX)<br>Impedance |               |
|--------------------------------|-----------------------------|---------------------------|---|---------------------------------|---------------|
|                                |                             |                           |   | 20°C, 100kHz                    | -10°C, 100kHz |
|                                |                             |                           |   | 25                              | 68            |
|                                | 150                         | 6.3×11                    | 700                                     | 0.17                            | 0.51          |
|                                | 330                         | 8×11.5                    | 1200                                    | 0.075                           | 0.23          |
|                                | 390                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 470                         | 10×12.5                   | 1700                                    | 0.053                           | 0.16          |
|                                | 560                         | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 680                         | 10×16                     | 2000                                    | 0.038                           | 0.12          |
|                                | 1000                        | 10×20                     | 2500                                    | 0.028                           | 0.084         |
|                                | 1200                        | 10×25                     | 2900                                    | 0.024                           | 0.072         |
|                                | 1500                        | 12.5×20                   | 2600                                    | 0.025                           | 0.075         |
|                                | 1800                        | 12.5×25                   | 3200                                    | 0.019                           | 0.057         |
|                                | 2200                        | 12.5×30                   | 3660                                    | 0.018                           | 0.054         |
|                                | 2200                        | 16×20                     | 3330                                    | 0.021                           | 0.063         |
|                                | 2700                        | 12.5×35                   | 4120                                    | 0.016                           | 0.048         |
|                                | 3300                        | 16×25                     | 3810                                    | 0.017                           | 0.051         |
| 35                             | 47                          | 5×11                      | 450                                     | 0.40                            | 1.2           |
|                                | 100                         | 6.3×11                    | 700                                     | 0.17                            | 0.51          |
|                                | 180                         | 8×11.5                    | 1200                                    | 0.075                           | 0.23          |
|                                | 220                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 270                         | 8×16                      | 1600                                    | 0.059                           | 0.18          |
|                                | 270                         | 10×12.5                   | 1700                                    | 0.053                           | 0.16          |
|                                | 330                         | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 330                         | 10×12.5                   | 1700                                    | 0.053                           | 0.16          |
|                                | 390                         | 8×20                      | 1960                                    | 0.041                           | 0.13          |
|                                | 390                         | 10×16                     | 2000                                    | 0.038                           | 0.12          |
|                                | 470                         | 10×16                     | 2000                                    | 0.038                           | 0.12          |
|                                | 560                         | 10×20                     | 2500                                    | 0.028                           | 0.084         |
|                                | 680                         | 10×25                     | 2900                                    | 0.024                           | 0.072         |
|                                | 820                         | 12.5×20                   | 2600                                    | 0.025                           | 0.075         |
|                                | 1000                        | 12.5×20                   | 2600                                    | 0.025                           | 0.075         |
|                                | 1200                        | 12.5×25                   | 3200                                    | 0.019                           | 0.057         |
|                                | 1500                        | 12.5×30                   | 3660                                    | 0.018                           | 0.054         |
|                                | 1800                        | 12.5×35                   | 4120                                    | 0.016                           | 0.048         |
|                                | 1800                        | 16×25                     | 3810                                    | 0.017                           | 0.051         |
| 50                             | 27                          | 5×11                      | 310                                     | 0.48                            | 1.5           |
|                                | 56                          | 6.3×11                    | 500                                     | 0.22                            | 0.66          |
|                                | 100                         | 8×11.5                    | 950                                     | 0.12                            | 0.36          |
|                                | 120                         | 8×11.5                    | 1300                                    | 0.11                            | 0.33          |
|                                | 120                         | 8×16                      | 1230                                    | 0.082                           | 0.25          |
|                                | 150                         | 10×12.5                   | 1280                                    | 0.073                           | 0.22          |
|                                | 180                         | 8×16                      | 1700                                    | 0.081                           | 0.24          |
|                                | 180                         | 8×20                      | 1580                                    | 0.058                           | 0.18          |
|                                | 220                         | 10×12.5                   | 1700                                    | 0.071                           | 0.21          |
|                                | 220                         | 10×16                     | 1650                                    | 0.053                           | 0.16          |
|                                | 270                         | 8×20                      | 2100                                    | 0.058                           | 0.17          |
|                                | 330                         | 10×16                     | 2100                                    | 0.052                           | 0.16          |

### ◆標準品一覧表／STANDARD SIZE

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

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法<br>Size φDxL<br>(mm) | 定格リップル<br>電流<br>Rated Ripple<br>Current | インピーダンス<br>(Ω MAX)<br>Impedance |               |
|--------------------------------|-----------------------------|---------------------------|---|---------------------------------|---------------|
|                                |                             |                           |   | 20°C, 100kHz                    | -10°C, 100kHz |
|                                |                             |                           |   | 50                              | 330           |
| 390                            | 10×25                       | 2420                      | 0.032                                   |                                 | 0.10          |
| 470                            | 10×20                       | 2500                      | 0.037                                   |                                 | 0.11          |
| 470                            | 12.5×16                     | 2200                      | 0.040                                   |                                 | 0.12          |
| 470                            | 12.5×20                     | 2300                      | 0.032                                   |                                 | 0.10          |
| 560                            | 10×25                       | 2900                      | 0.031                                   |                                 | 0.093         |
| 680                            | 12.5×20                     | 2700                      | 0.029                                   |                                 | 0.087         |
| 680                            | 12.5×25                     | 2800                      | 0.025                                   |                                 | 0.080         |
| 820                            | 12.5×30                     | 3370                      | 0.023                                   |                                 | 0.074         |
| 820                            | 16×20                       | 3070                      | 0.026                                   |                                 | 0.084         |
| 1000                           | 12.5×25                     | 3000                      | 0.022                                   |                                 | 0.066         |
| 1000                           | 12.5×30                     | 3500                      | 0.020                                   |                                 | 0.060         |
| 1000                           | 12.5×35                     | 3810                      | 0.021                                   |                                 | 0.067         |
| 1000                           | 16×25                       | 3510                      | 0.022                                   |                                 | 0.070         |
| 1200                           | 12.5×35                     | 4000                      | 0.017                                   |                                 | 0.051         |
| 1200                           | 16×20                       | 3100                      | 0.023                                   |                                 | 0.069         |
| 1500                           | 12.5×40                     | 4500                      | 0.019                                   |                                 | 0.057         |
| 1500                           | 16×25                       | 3600                      | 0.018                                   |                                 | 0.054         |
| 1500                           | 18×20                       | 3200                      | 0.029                                   |                                 | 0.087         |
| 2200                           | 16×31.5                     | 4100                      | 0.018                                   |                                 | 0.054         |
| 2200                           | 18×25                       | 3700                      | 0.022                                   | 0.066                           |               |
| 2700                           | 16×35.5                     | 4400                      | 0.016                                   | 0.048                           |               |
| 2700                           | 16×40                       | 4800                      | 0.014                                   | 0.042                           |               |
| 2700                           | 18×31.5                     | 4200                      | 0.019                                   | 0.057                           |               |
| 3300                           | 18×35.5                     | 4600                      | 0.016                                   | 0.048                           |               |
| 3900                           | 18×40                       | 5000                      | 0.014                                   | 0.042                           |               |
| 63                             | 18                          | 5×11                      | 240                                     | 0.71                            | 3.2           |
|                                | 47                          | 6.3×11                    | 420                                     | 0.28                            | 1.3           |
|                                | 82                          | 8×11.5                    | 720                                     | 0.18                            | 0.79          |
|                                | 100                         | 8×11.5                    | 1000                                    | 0.13                            | 0.39          |
|                                | 100                         | 8×16                      | 990                                     | 0.13                            | 0.58          |
|                                | 120                         | 8×16                      | 1300                                    | 0.095                           | 0.29          |
|                                | 120                         | 10×12.5                   | 990                                     | 0.110                           | 0.44          |
|                                | 150                         | 8×20                      | 1200                                    | 0.096                           | 0.43          |
|                                | 150                         | 10×12.5                   | 1300                                    | 0.080                           | 0.24          |
|                                | 180                         | 8×20                      | 1600                                    | 0.069                           | 0.21          |
|                                | 180                         | 10×16                     | 1200                                    | 0.076                           | 0.31          |
|                                | 220                         | 10×16                     | 1700                                    | 0.058                           | 0.17          |
|                                | 270                         | 10×20                     | 1570                                    | 0.056                           | 0.23          |
|                                | 270                         | 12.5×16                   | 1570                                    | 0.072                           | 0.27          |
|                                | 330                         | 10×20                     | 2000                                    | 0.042                           | 0.13          |
|                                | 330                         | 10×25                     | 1990                                    | 0.046                           | 0.19          |
|                                | 330                         | 12.5×16                   | 1900                                    | 0.045                           | 0.14          |
|                                | 390                         | 10×25                     | 2400                                    | 0.035                           | 0.11          |
|                                | 390                         | 12.5×20                   | 1990                                    | 0.041                           | 0.13          |
|                                | 470                         | 12.5×20                   | 2400                                    | 0.033                           | 0.099         |
|                                | 470                         | 12.5×25                   | 2460                                    | 0.031                           | 0.093         |
|                                | 560                         | 12.5×30                   | 2760                                    | 0.028                           | 0.084         |
|                                | 560                         | 16×20                     | 2380                                    | 0.032                           | 0.096         |
|                                | 680                         | 12.5×25                   | 2800                                    | 0.025                           | 0.075         |
|                                | 680                         | 12.5×35                   | 3040                                    | 0.024                           | 0.072         |
|                                | 820                         | 12.5×30                   | 3200                                    | 0.022                           | 0.066         |
|                                | 820                         | 16×20                     | 2900                                    | 0.025                           | 0.075         |
|                                | 820                         | 16×25                     | 2890                                    | 0.025                           | 0.075         |
| 1000                           | 12.5×35                     | 3500                      | 0.018                                   | 0.054                           |               |
| 1000                           | 16×25                       | 3200                      | 0.020                                   | 0.060                           |               |
| 1200                           | 12.5×40                     | 3800                      | 0.021                                   | 0.063                           |               |
| 1200                           | 18×20                       | 3000                      | 0.032                                   | 0.096                           |               |
| 1500                           | 16×31.5                     | 3500                      | 0.020                                   | 0.060                           |               |

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>(μF) | 外形寸法<br>Size φDxL<br>(mm) | 定格リップル<br>電流<br>Rated Ripple<br>Current | インピーダンス<br>(Ω MAX)<br>Impedance |               |       |
|--------------------------------|-----------------------------|---------------------------|---|---------------------------------|---------------|-------|
|                                |                             |                           |   | 20°C, 100kHz                    | -10°C, 100kHz |       |
|                                |                             |                           |   | 63                              | 1500          | 18×25 |
| 1800                           | 16×35.5                     | 3800                      | 0.017                                   |                                 | 0.051         |       |
| 1800                           | 18×31.5                     | 3700                      | 0.020                                   |                                 | 0.060         |       |
| 2200                           | 16×40                       | 4100                      | 0.015                                   |                                 | 0.045         |       |
| 2200                           | 18×35.5                     | 3900                      | 0.017                                   |                                 | 0.051         |       |
| 2700                           | 18×40                       | 4300                      | 0.015                                   |                                 | 0.045         |       |
| 80                             | 12                          | 5×11                      | 235                                     |                                 | 0.72          | 3.2   |
|                                | 12                          | 5×11                      | 220                                     |                                 | 1.20          | 5.4   |
|                                | 27                          | 6.3×11                    | 390                                     | 0.34                            | 1.5           |       |
|                                | 27                          | 6.3×11                    | 370                                     | 0.46                            | 2.1           |       |
|                                | 47                          | 8×11.5                    | 650                                     | 0.20                            | 0.9           |       |
|                                | 47                          | 8×11.5                    | 620                                     | 0.29                            | 1.3           |       |
|                                | 56                          | 8×16                      | 780                                     | 0.20                            | 0.9           |       |
|                                | 68                          | 10×12.5                   | 780                                     | 0.17                            | 0.66          |       |
|                                | 82                          | 8×16                      | 820                                     | 0.14                            | 0.63          |       |
|                                | 82                          | 8×20                      | 1040                                    | 0.16                            | 0.66          |       |
|                                | 100                         | 10×12.5                   | 860                                     | 0.14                            | 0.56          |       |
|                                | 100                         | 10×16                     | 1040                                    | 0.11                            | 0.47          |       |
|                                | 120                         | 8×20                      | 1090                                    | 0.12                            | 0.54          |       |
|                                | 150                         | 10×16                     | 1150                                    | 0.09                            | 0.36          |       |
|                                | 150                         | 10×20                     | 1430                                    | 0.084                           | 0.34          |       |
|                                | 150                         | 12.5×16                   | 1430                                    | 0.110                           | 0.34          |       |
|                                | 180                         | 10×25                     | 1620                                    | 0.069                           | 0.28          |       |
|                                | 220                         | 10×20                     | 1570                                    | 0.068                           | 0.28          |       |
|                                | 220                         | 12.5×16                   | 1430                                    | 0.090                           | 0.27          |       |
|                                | 220                         | 12.5×20                   | 1750                                    | 0.062                           | 0.18          |       |
|                                | 270                         | 10×25                     | 1780                                    | 0.055                           | 0.22          |       |
|                                | 270                         | 12.5×25                   | 2210                                    | 0.047                           | 0.14          |       |
|                                | 330                         | 12.5×20                   | 1800                                    | 0.048                           | 0.15          |       |
|                                | 330                         | 12.5×30                   | 2400                                    | 0.042                           | 0.13          |       |
|                                | 330                         | 16×20                     | 1950                                    | 0.048                           | 0.15          |       |
|                                | 390                         | 12.5×25                   | 2210                                    | 0.038                           | 0.12          |       |
|                                | 390                         | 12.5×35                   | 2600                                    | 0.036                           | 0.11          |       |
|                                | 470                         | 12.5×30                   | 2520                                    | 0.033                           | 0.11          |       |
|                                | 470                         | 12.5×40                   | 2860                                    | 0.032                           | 0.095         |       |
|                                | 470                         | 16×20                     | 2150                                    | 0.036                           | 0.120         |       |
|                                | 470                         | 16×25                     | 2430                                    | 0.038                           | 0.120         |       |
|                                | 470                         | 18×20                     | 2270                                    | 0.045                           | 0.140         |       |
| 560                            | 12.5×35                     | 2860                      | 0.026                                   | 0.078                           |               |       |
| 560                            | 16×31.5                     | 2640                      | 0.032                                   | 0.095                           |               |       |
| 680                            | 16×25                       | 2620                      | 0.028                                   | 0.084                           |               |       |
| 680                            | 18×20                       | 2280                      | 0.032                                   | 0.096                           |               |       |
| 680                            | 16×35.5                     | 2860                      | 0.029                                   | 0.086                           |               |       |
| 680                            | 18×25                       | 2500                      | 0.036                                   | 0.110                           |               |       |
| 820                            | 16×31.5                     | 2900                      | 0.022                                   | 0.066                           |               |       |
| 820                            | 16×40                       | 3510                      | 0.027                                   | 0.081                           |               |       |
| 820                            | 18×31.5                     | 2860                      | 0.030                                   | 0.090                           |               |       |
| 1000                           | 16×35.5                     | 3150                      | 0.020                                   | 0.060                           |               |       |
| 1000                           | 18×25                       | 2750                      | 0.027                                   | 0.081                           |               |       |
| 1000                           | 18×35.5                     | 3510                      | 0.027                                   | 0.081                           |               |       |
| 1200                           | 16×40                       | 3710                      | 0.018                                   | 0.054                           |               |       |
| 1200                           | 18×31.5                     | 3150                      | 0.020                                   | 0.060                           |               |       |
| 1200                           | 18×40                       | 3860                      | 0.026                                   | 0.076                           |               |       |
| 1500                           | 18×35.5                     | 3710                      | 0.018                                   | 0.054                           |               |       |
| 1800                           | 18×40                       | 4060                      | 0.017                                   | 0.051                           |               |       |

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◆標準品一覧表／STANDARD SIZE

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

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size $\phi$ DxL<br>(mm) | 定格リプル<br>電流<br>RatedRipple<br>Current | インピーダンス<br>( $\Omega$ MAX)<br>Impedance |               |
|--------------------------------|-----------------------------------|---------------------------------|---------------------------------------|---|---------------|
|                                |                                   |                                 |                                       | 20°C, 100kHz                            | -10°C, 100kHz |
|                                |                                   |                                 |                                       | 100                                     | 8.2 ●         |
|                                | 8.2                               | 5×11                            | 220                                   | 1.2                                     | 5.4           |
|                                | 18 ●                              | 6.3×11                          | 390                                   | 0.34                                    | 1.5           |
|                                | 18                                | 6.3×11                          | 370                                   | 0.46                                    | 2.1           |
|                                | 33 ●                              | 8×11.5                          | 650                                   | 0.2                                     | 0.9           |
|                                | 33                                | 8×11.5                          | 620                                   | 0.29                                    | 1.3           |
|                                | 47 ●                              | 8×16                            | 820                                   | 0.14                                    | 0.63          |
|                                | 47                                | 8×16                            | 780                                   | 0.20                                    | 0.90          |
|                                | 56 ●                              | 10×12.5                         | 860                                   | 0.14                                    | 0.56          |
|                                | 56                                | 10×12.5                         | 780                                   | 0.17                                    | 0.66          |
|                                | 68 ●                              | 8×20                            | 1090                                  | 0.12                                    | 0.54          |
|                                | 68                                | 8×20                            | 1040                                  | 0.16                                    | 0.66          |
|                                | 82 ●                              | 10×16                           | 1150                                  | 0.09                                    | 0.36          |
|                                | 82                                | 10×16                           | 1040                                  | 0.11                                    | 0.47          |
|                                | 100                               | 10×20                           | 1430                                  | 0.084                                   | 0.34          |
|                                | 100                               | 12.5×16                         | 1430                                  | 0.11                                    | 0.34          |
|                                | 120                               | 10×20                           | 1570                                  | 0.068                                   | 0.28          |
|                                | 120                               | 10×25                           | 1620                                  | 0.069                                   | 0.28          |
|                                | 120                               | 12.5×16                         | 1430                                  | 0.090                                   | 0.27          |
|                                | 150                               | 10×25                           | 1780                                  | 0.055                                   | 0.22          |
|                                | 150                               | 12.5×20                         | 1750                                  | 0.062                                   | 0.18          |
|                                | 180                               | 12.5×20                         | 1800                                  | 0.048                                   | 0.15          |
|                                | 220 ●                             | 12.5×25                         | 2210                                  | 0.038                                   | 0.12          |
|                                | 220                               | 12.5×25                         | 2210                                  | 0.047                                   | 0.14          |
|                                | 270 ●                             | 12.5×30                         | 2520                                  | 0.033                                   | 0.11          |
|                                | 270                               | 12.5×30                         | 2400                                  | 0.042                                   | 0.13          |
|                                | 270                               | 16×20                           | 1950                                  | 0.048                                   | 0.15          |
|                                | 330                               | 12.5×35                         | 2600                                  | 0.036                                   | 0.11          |
|                                | 330                               | 16×20                           | 2150                                  | 0.036                                   | 0.12          |
|                                | 390                               | 12.5×35                         | 2860                                  | 0.026                                   | 0.078         |
|                                | 390                               | 12.5×40                         | 2860                                  | 0.032                                   | 0.095         |
|                                | 390 ●                             | 16×25                           | 2620                                  | 0.028                                   | 0.084         |
|                                | 390                               | 16×25                           | 2430                                  | 0.038                                   | 0.120         |
|                                | 390 ●                             | 18×20                           | 2280                                  | 0.032                                   | 0.096         |
|                                | 390                               | 18×20                           | 2270                                  | 0.045                                   | 0.140         |
|                                | 470                               | 16×31.5                         | 2640                                  | 0.032                                   | 0.095         |
|                                | 470                               | 18×25                           | 2500                                  | 0.036                                   | 0.110         |
|                                | 560                               | 16×31.5                         | 2900                                  | 0.022                                   | 0.066         |
|                                | 560                               | 16×35.5                         | 2860                                  | 0.029                                   | 0.086         |
|                                | 560                               | 18×25                           | 2750                                  | 0.027                                   | 0.081         |
|                                | 560                               | 18×31.5                         | 2860                                  | 0.030                                   | 0.090         |
|                                | 680                               | 16×35.5                         | 3150                                  | 0.020                                   | 0.060         |
|                                | 680                               | 16×40                           | 3510                                  | 0.027                                   | 0.081         |
|                                | 680                               | 18×31.5                         | 3150                                  | 0.020                                   | 0.060         |
|                                | 680                               | 18×35.5                         | 3510                                  | 0.027                                   | 0.081         |
|                                | 820                               | 16×40                           | 3710                                  | 0.018                                   | 0.054         |
|                                | 820                               | 18×35.5                         | 3710                                  | 0.018                                   | 0.054         |
|                                | 820                               | 18×40                           | 3860                                  | 0.026                                   | 0.076         |
|                                | 1000                              | 18×40                           | 4060                                  | 0.017                                   | 0.051         |

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size $\phi$ DxL<br>(mm) | 定格リプル<br>電流<br>RatedRipple<br>Current | インピーダンス<br>( $\Omega$ MAX)<br>Impedance |               |
|--------------------------------|-----------------------------------|---------------------------------|---------------------------------------|---|---------------|
|                                |                                   |                                 |                                       | 20°C, 100kHz                            | -10°C, 100kHz |
|                                |                                   |                                 |                                       | 120                                     | 33            |
|                                | 47                                | 8×20                            | 735                                   | 0.19                                    | 0.76          |
|                                | 56                                | 10×16                           | 780                                   | 0.17                                    | 0.72          |
|                                | 82                                | 10×20                           | 1040                                  | 0.12                                    | 0.52          |
|                                | 100                               | 10×25                           | 1250                                  | 0.10                                    | 0.43          |
|                                | 120                               | 10×28                           | 1400                                  | 0.09                                    | 0.38          |
|                                | 120                               | 12.5×20                         | 1430                                  | 0.085                                   | 0.31          |
|                                | 150                               | 12.5×25                         | 1620                                  | 0.21                                    | 0.84          |
|                                | 180                               | 12.5×30                         | 1880                                  | 0.18                                    | 0.72          |
|                                | 180                               | 16×20                           | 1700                                  | 0.17                                    | 0.65          |
|                                | 220                               | 12.5×35                         | 2140                                  | 0.15                                    | 0.60          |
|                                | 270                               | 12.5×40                         | 2340                                  | 0.12                                    | 0.48          |
|                                | 270                               | 16×25                           | 2100                                  | 0.13                                    | 0.49          |
|                                | 270                               | 18×20                           | 1850                                  | 0.14                                    | 0.52          |
|                                | 330                               | 16×31.5                         | 2400                                  | 0.10                                    | 0.38          |
|                                | 390                               | 16×35.5                         | 2600                                  | 0.085                                   | 0.32          |
|                                | 390                               | 18×25                           | 2270                                  | 0.10                                    | 0.37          |
|                                | 470                               | 16×40                           | 2860                                  | 0.075                                   | 0.29          |
|                                | 470                               | 18×31.5                         | 2470                                  | 0.08                                    | 0.30          |
|                                | 560                               | 18×35.5                         | 2860                                  | 0.07                                    | 0.26          |
|                                | 680                               | 18×40                           | 3510                                  | 0.06                                    | 0.22          |

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