

特性/ Features

- 85℃ standard series for general purposes
- Load Life:2000 hours at 85℃
- RoHS compliant
- 一般用途品
- 85℃负荷寿命 2000小时
- 符合RoHS指令

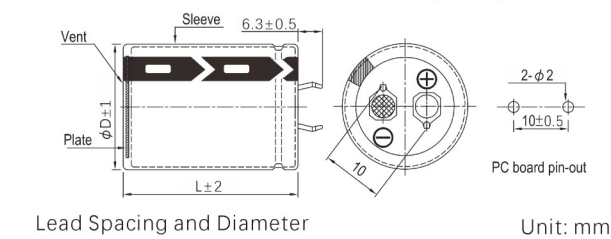


基板自立Snap-in

表1 规格表 Specifications

| 项目 Items                                                                                                                                                                                                                                   | 性 能 Performance                                                                                                                                                                                                       |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------|------|------|------|------|------|-----------------------------------------------------------|------|------|------|------|------|------|---|
| 工作温度范围<br>Category Temperature Range                                                                                                                                                                                                       | 16~100V                                                                                                                                                                                                               |                                                          |      |      |      |      |      |      | 160~450V                                                  |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | -40℃~+85℃                                                                                                                                                                                                             |                                                          |      |      |      |      |      |      | -25℃~+85℃                                                 |      |      |      |      |      |      |   |
| 额定静电容量容许误差值<br>Capacitance Tolerance                                                                                                                                                                                                       | ± 20% (120 Hz, 20℃)                                                                                                                                                                                                   |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
| 漏电流<br>Leakage Current(at 20℃)                                                                                                                                                                                                             | 测试时间<br>Time                                                                                                                                                                                                          | 2 分钟后<br>after 2 minutes                                 |      |      |      |      |      |      | 5 分钟后<br>after 2 minutes                                  |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 漏电流<br>Leakage Current                                                                                                                                                                                                | I ≤ 0.03CV or 3(mA/毫安)<br>之中任一个较小值以下whichever is smaller |      |      |      |      |      |      | I ≤ 3√V or 0.94 (mA/毫安)<br>之中任一个较小值以下whichever is smaller |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | I = 漏电流(μA/微安)、C = 额定静电容量(μF/微法拉)、V = 额定直流工作电压(V/伏特)<br>Where,C = rated capacitance in μF,V = rated DC working voltage in V                                                                                           |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
| 损失角正切值<br>Tanδ (at 120 Hz, 20℃)                                                                                                                                                                                                            | 额定电压<br>Rated Voltage                                                                                                                                                                                                 | 16                                                       | 25   | 35   | 50   | 63   | 71   | 80   | 100                                                       | 160  | 200  | 250  | 400  | 420  | 450  |   |
|                                                                                                                                                                                                                                            | 损失角正切值<br>Tanδ (max)                                                                                                                                                                                                  | 0.40                                                     | 0.45 | 0.40 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20                                                      | 0.15 | 0.15 | 0.15 | 0.25 | 0.25 | 0.25 |   |
| 温度特性(120 Hz)<br>Low Temperature Characteristics                                                                                                                                                                                            | 阻抗比不可大于下表所列数值 Impedance ratio shall not exceed the values given in the table below.                                                                                                                                   |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 额定电压<br>Rated Voltage                                                                                                                                                                                                 | 16                                                       | 25   | 35   | 50   | 63   | 71   | 80   | 100                                                       | 160  | 200  | 250  | 400  | 420  | 450  |   |
|                                                                                                                                                                                                                                            | 阻抗比<br>Impedance Ratio                                                                                                                                                                                                | Z(-25℃)/Z(+20℃)                                          | 4    | 3    | 3    | 2    | 2    | 2    | 2                                                         | 2    | 4    | 4    | 4    | 8    | 8    | 8 |
| 耐久性<br>Endurance                                                                                                                                                                                                                           | 阻抗比<br>Impedance Ratio                                                                                                                                                                                                | Z(-40℃)/Z(+20℃)                                          | 15   | 15   | 10   | 8    | 6    | 6    | 5                                                         | 5    |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 保证寿命时间<br>Test Time                                                                                                                                                                                                   | 2,000 hours                                              |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 静电容量变化率<br>Capacitance Change                                                                                                                                                                                         | ≤ 初始值的± 20%<br>Within ±20% of initial value              |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 损失角正切值<br>Tanδ                                                                                                                                                                                                        | ≤ 初始规格值的200% Less than 200% of specified value           |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 漏电流<br>Leakage Current                                                                                                                                                                                                | ≤ 初始规格值 Within specified value                           |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
| *于 85℃环境中供给容许纹波电流值与额定电压 2,000 小时后, 待制品回复至 20℃的环境中进行量测时, 需满足上列要求。<br>*The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 2,000 hours at 85℃. |                                                                                                                                                                                                                       |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
| 高温无负荷特性<br>Shelf Life Test                                                                                                                                                                                                                 | 保证寿命时间<br>Test Time                                                                                                                                                                                                   | 1,000 hours                                              |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 静电容量变化率<br>Capacitance Change                                                                                                                                                                                         | ≤ 初始值的± 20%<br>Within ±20% of initial value              |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 损失角正切值<br>Tanδ                                                                                                                                                                                                        | ≤ 初始规格值的200% Less than 200% of specified value           |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | 漏电流<br>Leakage Current                                                                                                                                                                                                | ≤ 初始规格值 Within specified value                           |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |
|                                                                                                                                                                                                                                            | *于 85℃环境中不供给额定电压 1,000 小时后, 待制品回复至 20℃的环境中进行量测时, 需满足上列要求。<br>*The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 85℃ without voltage applied. |                                                          |      |      |      |      |      |      |                                                           |      |      |      |      |      |      |   |

表2 外形尺寸 Dimensions(mm)



|      |         |    |    |    |    |    |       |    |    |    |    |  |
|------|---------|----|----|----|----|----|-------|----|----|----|----|--|
| ΦD±1 | 22,25,4 |    |    |    |    |    | 30,35 |    |    |    |    |  |
| L±2  | 25      | 30 | 35 | 40 | 45 | 50 | 30    | 35 | 40 | 45 | 50 |  |

表3 纹波电流与频率补正系数  
Ripple Current and Frequency Multipliers

| Freq.(Hz)        |             | 60         | 120 | 500  | 1K  | 100K |
|------------------|-------------|------------|-----|------|-----|------|
| Rated Volt.(Vdc) | Coefficient | $\leq 100$ | 0.8 | 1.00 | 1.2 | 1.2  |
|                  |             | $\geq 160$ | 0.8 | 1.00 | 1.2 | 1.3  |

■表4 标准品一览表 Standard Size

Dimension and Permissible Ripple Current

Dimension:  $\phi D \times L$ (mm)  
Ripple Current: mA/rms at 120 Hz, 105°C

| Rated Volt.(Voc)       | 16           |       | 25           |       | 35           |       | 50           |       | 63           |       | 71           |       | 80           |       |
|------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Surge Volt.(Voc)       | 20           |       | 32           |       | 44           |       | 63           |       | 79           |       | 89           |       | 100          |       |
| Item<br>Cap.( $\mu$ F) | D $\times$ L | R. C. | D $\times$ L | R. C. | D $\times$ L | R. C. | D $\times$ L | R. C. | D $\times$ L | R. C. | D $\times$ L | R. C. | D $\times$ L | R. C. |
| 1000                   |              |       |              |       |              |       |              |       |              |       |              |       | 22x25        | 1560  |
| 2200                   |              |       |              |       |              |       | 22x25        | 1930  | 22x30        | 2350  | 22x40        | 1595  | 22x40        | 2530  |
| 3300                   |              |       |              |       |              |       | 22x30        | 2410  | 22x40        | 2690  | 22x45        | 2072  | 25.4x40      | 3250  |
| 4700                   |              |       |              |       | 22x30        | 2460  | 22x40        | 3010  | 25.4x40      | 3370  | 25.4x50      | 2779  | 30x40        | 4150  |
| 6800                   |              |       | 22x30        | 2560  | 22x40        | 2890  | 25.4x40      | 3870  | 25.4x50      | 4410  | 30x45        | 3008  | 30x50        | 5180  |
| 8200                   |              |       | 22x35        | 2810  | 22x45        | 3470  | 25.4x45      | 4370  | 30x45        | 4900  | 35x45        | 3568  | 35x45        | 5830  |
| 10000                  | 22x25        | 2850  | 22x40        | 3160  | 25.4x40      | 3590  | 30x40        | 5020  | 30x50        | 5490  |              |       |              |       |
| 12000                  | 22x30        | 3200  | 22x40        | 3480  | 25.4x45      | 4010  | 35x40        | 5600  | 35x50        | 6300  |              |       |              |       |
| 15000                  | 22x35        | 3690  | 22x40        | 4000  | 30x40        | 4800  | 35x45        | 6440  |              |       |              |       |              |       |
| 18000                  | 22x40        | 3980  | 25.4x45      | 4660  | 30x45        | 5180  | 35x50        | 6710  |              |       |              |       |              |       |
| 22000                  | 22x50        | 4520  |              |       |              |       |              |       |              |       |              |       |              |       |

制品尺寸与容许纹波电流一览表

尺寸: 直径( $\phi D$ ) $\times$ 长度(L), (毫米/mm)  
容许纹波电流: 毫安/均方根值(mA/rms), 120 赫兹(Hz), 105°C

Dimension and Permissible Ripple Current

Dimension:  $\phi D \times L$ (mm)  
Ripple Current: mA/rms at 120 Hz, 105°C

| Rated Volt.(Voc) | 100     |       | 160     |       | 200     |       | 250     |       | 400     |       | 420   |       | 450     |       |
|------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|-------|
| Surge Volt.(Voc) | 125     |       | 200     |       | 250     |       | 300     |       | 450     |       | 470   |       | 500     |       |
| Item<br>Cap.(μF) | D×L     | R. C. | D×L     | R. C. | D×L     | R. C. | D×L     | R. C. | D×L     | R. C. | D×L   | R. C. | D×L     | R. C. |
| 47               |         |       |         |       |         |       |         |       |         |       |       |       | 22x25   | 147   |
| 68               |         |       |         |       |         |       |         |       | 22x25   | 710   |       |       | 22x25   | 680   |
| 82               |         |       |         |       |         |       |         |       | 22x25   | 800   |       |       | 22x30   | 820   |
| 100              |         |       |         |       | 22x25   | 360   |         |       | 22x30   | 940   |       |       | 22x35   | 840   |
| 120              |         |       |         |       |         |       |         |       | 22x30   | 1040  | 22x25 | 1040  | 22x35   | 1020  |
| 150              |         |       |         |       | 22x25   | 500   |         |       | 22x35   | 1180  | 22x30 | 1200  | 25.4x35 | 1190  |
| 180              |         |       |         |       |         |       | 22x25   | 1140  | 25.4x35 | 1370  | 22x35 | 1480  | 25.4x40 | 1330  |
| 220              |         |       |         |       | 22x25   | 600   | 22x25   | 1180  | 25.4x35 | 1560  | 22x35 | 1560  | 25.4x30 | 1270  |
|                  |         |       |         |       |         |       |         |       | 25.4x40 |       | 22x45 | 1270  | 30x35   | 1510  |
|                  |         |       |         |       |         |       |         |       |         |       | 22x40 | 1560  |         |       |
| 270              |         |       |         |       |         |       |         |       | 30x35   | 1730  | 25x40 | 1560  | 30x40   | 1800  |
|                  |         |       |         |       |         |       |         |       |         |       | 30x40 | 1730  |         |       |
| 330              |         |       |         |       | 22x25   | 1440  | 22x30   | 1580  | 30x40   | 1950  | 25x45 | 1950  | 30x30   | 1100  |
|                  |         |       |         |       |         |       |         |       |         |       | 30x40 | 1950  | 35x45   | 2020  |
| 390              |         |       |         |       |         |       |         |       |         |       | 30x45 | 1560  | 35x30   | 1292  |
| 470              |         |       | 22x30   | 1770  | 22x35   | 1880  | 25.4x35 | 2050  | 35x40   | 2390  |       |       | 35x45   | 2550  |
| 560              | 22x25   | 1280  |         |       |         |       |         |       | 35x45   | 2710  |       |       |         |       |
| 680              |         |       | 22x40   | 2240  | 22x45   | 2190  | 25.4x40 | 2540  | 35x50   | 2950  |       |       |         |       |
| 820              |         |       |         |       | 25.4x40 | 2660  |         |       |         |       |       |       |         |       |
| 1000             | 22x30   | 2020  | 25.4x40 | 2860  |         |       | 30x45   | 3390  |         |       |       |       |         |       |
| 2200             | 25.4x40 | 3200  | 35x45   | 4720  |         |       |         |       |         |       |       |       |         |       |
| 3300             | 30x40   | 4050  |         |       |         |       |         |       |         |       |       |       |         |       |
| 4700             | 30x50   | 5130  |         |       |         |       |         |       |         |       |       |       |         |       |
| 6800             | 35x50   | 6010  |         |       |         |       |         |       |         |       |       |       |         |       |

制品尺寸与容许纹波电流一览表

尺寸: 直径( $\phi D$ ) $\times$ 长度(L), (毫米/mm)  
容许纹波电流: 毫安/均方根值(mA/rms), 120 赫兹(Hz), 105°C

■表5 产品编码说明 Part Numbering System

| L                                                          | LX                 | 250                                                                                                                                                                        | M                                           | 108                   | S40               | 5                           | S1                       | A                                     | A                     |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
|------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-----------------------|-------------------|-----------------------------|--------------------------|---------------------------------------|-----------------------|-----|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-------|-----|-------|-----|------|-----|-------|-----|--------|-----|---------|-----|-------------------------------------------------------------------------------------------------------------|------------|--------|-------|-----|----------------------------------|--|--|--|
| 电容器类别<br>Capacitors Name                                   | 系列名<br>Series Name | 额定电压<br>Rated voltage                                                                                                                                                      | 额定静电容量<br>容许误差值<br>Capacitance<br>tolerance | 额定静电容量<br>Capacitance | 制品尺寸<br>Case size | PET套颜色管<br>PET Sleeve color | 加工形状<br>Processing shape | 电气特性<br>Electrical<br>characteristics | 内部特征码<br>Internal use |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 基板自立型铝电解电容器<br>Snap-in<br>Aluminum Electrolytic Capacitors | KLX Series         | 范例Example:<br><table><tr><th>Voltage</th><th>Symbol</th></tr><tr><td>6.3V</td><td>6R3</td></tr><tr><td>10V</td><td>010</td></tr><tr><td>250V</td><td>250</td></tr></table> | Voltage                                     | Symbol                | 6.3V              | 6R3                         | 10V                      | 010                                   | 250V                  | 250 | M=±20% | 范例Example:<br><table><tr><th>Cap.</th><th>Symbol</th></tr><tr><td>0.1μF</td><td>104</td></tr><tr><td>2.2μF</td><td>225</td></tr><tr><td>33μF</td><td>336</td></tr><tr><td>470μF</td><td>477</td></tr><tr><td>6800μF</td><td>688</td></tr><tr><td>82000μF</td><td>829</td></tr></table> | Cap. | Symbol | 0.1μF | 104 | 2.2μF | 225 | 33μF | 336 | 470μF | 477 | 6800μF | 688 | 82000μF | 829 | 范例Example:<br><table><tr><th>φDia. (mm)</th><th>Symbol</th></tr><tr><td>30x40</td><td>S40</td></tr></table> | φDia. (mm) | Symbol | 30x40 | S40 | 紫体银字<br>Purple body silver print |  |  |  |
| Voltage                                                    | Symbol             |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 6.3V                                                       | 6R3                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 10V                                                        | 010                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 250V                                                       | 250                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| Cap.                                                       | Symbol             |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 0.1μF                                                      | 104                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 2.2μF                                                      | 225                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 33μF                                                       | 336                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 470μF                                                      | 477                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 6800μF                                                     | 688                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 82000μF                                                    | 829                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| φDia. (mm)                                                 | Symbol             |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |
| 30x40                                                      | S40                |                                                                                                                                                                            |                                             |                       |                   |                             |                          |                                       |                       |     |        |                                                                                                                                                                                                                                                                                        |      |        |       |     |       |     |      |     |       |     |        |     |         |     |                                                                                                             |            |        |       |     |                                  |  |  |  |

△如需了解更详细介绍, 请联系我们  
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