

SU series Low ESR $\leq 7\text{m}\Omega$

SU系列ESR $\leq 7\text{m}\Omega$ 产品

Features(特点)

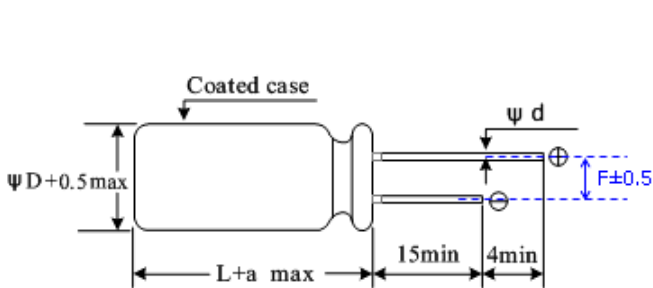
- ★ Ultra Low ESR at high frequency range(在高频范围非常低的ESR).
- ★ Very Large permissible ripple current(允许大纹波电流).

Specifications(产品规格)

| item<br>项目                                                                                    | Performance Characteristics<br>性能、特点                                                              |                                                                    |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Operating Temperature Range<br>工作温度范围                                                         | -55~+105℃                                                                                         |                                                                    |
| Rated Voltage Range<br>额定电压范围                                                                 | 2.5~16vdc                                                                                         |                                                                    |
| Capacitance Tolerance<br>容量公差                                                                 | $\pm 20\%$ (120Hz, +20℃)                                                                          |                                                                    |
| Leakage Current(+20℃, max)<br>漏电流                                                             | $\leq 0.2\text{CV}(\mu\text{A}, \text{after } 2 \text{ minutes})$<br>充电2分钟后漏电 $\leq 0.2\text{cv}$ |                                                                    |
| Dissipation Factor(损耗系数)<br>( $\tan\delta$ , at 20℃, 120Hz)                                   | Not to exceed the value specified<br>不超过指定值                                                       |                                                                    |
| ESR(100KHz)                                                                                   | Not to exceed the value specified<br>不超过指定值                                                       |                                                                    |
| Endurance(耐久性)<br><br>105℃, 2000h, at rated voltage<br><br>105℃, 2000h, 不超过额定电压               | Capacitance Change                                                                                | Within $\pm 20\%$ of the value before test<br>测试前的值的 $\pm 20\%$ 以内 |
|                                                                                               | Leakage Current                                                                                   | Not to exceed the value specified<br>不超过指定值                        |
|                                                                                               | ESR                                                                                               | Not to exceed 150% of the value specified<br>不超过指定值的150%           |
|                                                                                               | Dissipation Factor                                                                                | Not to exceed 150% of the value specified<br>不超过指定值的150%           |
| Moisture Resistance(耐湿性)<br><br>Stored at 60℃, RH90~95%, 2000h<br><br>存放在60℃, RH90~95%, 2000h | Capacitance Change                                                                                | Within $\pm 20\%$ of the value before test<br>测试前的值的 $\pm 20\%$ 以内 |
|                                                                                               | Leakage Current                                                                                   | Not to exceed the value specified<br>不超过指定值                        |
|                                                                                               | ESR                                                                                               | Not to exceed 150% of the value specified<br>不超过指定值的150%           |
|                                                                                               | Dissipation Factor                                                                                | Not to exceed 150% of the value specified<br>不超过指定值的150%           |

Frequency Coefficient for Ripple Current(纹波电流的频率系数)

| Frequency   | 120Hz $\leq$ freq. <1KHz | 1KHz $\leq$ freq. <10KHz | 10KHz $\leq$ freq. <100KHz | 100KHz $\leq$ freq. <300KHz |
|-------------|--------------------------|--------------------------|----------------------------|-----------------------------|
| Coefficient | 0.05                     | 0.3                      | 0.7                        | 1                           |



| SU      |            |     |       |         | mm |
|---------|------------|-----|-------|---------|----|
| ΦDXL    | ΦD+0.5max. | a   | F±0.5 | Φd±0.05 |    |
| 8X8     | 8.0        | 1.0 | 3.5   | 0.6     |    |
| 8X11.5  | 8.0        | 1.5 | 3.5   | 0.6     |    |
| 10X12.5 | 10.0       | 1.5 | 5.0   | 0.6     |    |

Size List(尺寸清单)

| WV<br>(5V)<br>Cap(uF) | 2.5<br>(2.8) | 4<br>(4.6)             | 6.3<br>(7.2) | 10<br>(11.5)   | 16<br>(18.4)   |
|-----------------------|--------------|------------------------|--------------|----------------|----------------|
| 180                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 8X11.5         |
| 220                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 8X11.5         |
| 270                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 8X11.5         |
| 330                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 8X11.5/10X12.5 |
| 390                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 10X12.5        |
| 470                   |              |                        | 8X8/8X11.5   | 8X8/8X11.5     | 8X11.5/10X12.5 |
| 560                   | 8X8/8X11.5   | 8X8/8X11.5             | 8X8/8X11.5   | 8X8/8X11.5     | 10X12.5        |
| 680                   | 8X8/8X11.5   | 8X8/8X11.5             | 8X8/8X11.5   | 8X11.5/10X12.5 | 10X12.5        |
| 820                   | 8X8/8X11.5   | 8X8/8X11.5/<br>10X12.5 | 8X11.5       | 8X11.5/10X12.5 | 10X12.5        |
| 1000                  | 8X8/8X11.5   | 8X8/8X11.5             | 10X12.5      | 10X12.5        |                |
| 1200                  | 8X8/8X11.5   | 8X11.5/10X12.5         | 10X12.5      | 10X12.5        |                |
| 1500                  | 8X8/8X11.5   | 8X11.5/10X12.5         | 10X12.5      | 10X12.5        |                |
| 2000                  | 10X12.5      | 10X12.5                | 10X12.5      |                |                |
| 2500                  | 10X12.5      | 10X12.5                |              |                |                |
| 2700                  | 10X12.5      |                        |              |                |                |
| 3000                  | 10X12.5      |                        |              |                |                |
| 3300                  | 10X12.5      |                        |              |                |                |
| 3500                  | 10X12.5      |                        |              |                |                |

Dimensions & Characteristics(尺寸及特性)

Ripple Current(mA.rms) at 105℃,100KHz

| W.V<br>(V) | Capacitance<br>(uF) | LC.<br>(uA,2min) | tgδ<br>(120Hz,20℃) | ESR<br>(mΩ,100KHz) | Maximum Permissible<br>Current(mA,rms) | Size<br>ΦDXL(mm) |
|------------|---------------------|------------------|--------------------|--------------------|----------------------------------------|------------------|
| 2.5        | 560                 | 280              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 680                 | 340              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 820                 | 410              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 1000                | 500              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 1200                | 600              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 1500                | 750              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 2000                | 1000             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 2500                | 1250             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 2700                | 1350             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 3000                | 1500             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 3300                | 1650             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 3500                | 1750             | 0.08               | 7                  | 6640                                   | 10X12.5          |
| 4          | 560                 | 448              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 680                 | 544              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 820                 | 656              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            |                     |                  |                    |                    | 6100                                   | 10X12.5          |
|            | 1000                | 800              | 0.08               | 7                  | 6100                                   | 8X8 / 8X11.5     |
|            | 1200                | 960              | 0.08               | 7                  | 6100                                   | 8X11.5           |
|            |                     |                  |                    |                    | 6640                                   | 10X12.5          |
|            | 1500                | 1200             | 0.08               | 7                  | 6100                                   | 8X11.5 / 10X12.5 |
|            | 2000                | 1600             | 0.08               | 7                  | 6640                                   | 10X12.5          |
| 6.3        | 2500                | 2000             | 0.08               | 7                  | 6640                                   | 10X12.5          |
|            | 180                 | 227              | 0.07               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 220                 | 277              | 0.07               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 270                 | 340              | 0.07               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 330                 | 416              | 0.07               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 390                 | 491              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 470                 | 592              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 560                 | 706              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 680                 | 857              | 0.08               | 7                  | 6100 / 6100                            | 8X8 / 8X11.5     |
|            | 820                 | 1033             | 0.10               | 7                  | 6100                                   | 8X11.5           |
|            | 1000                | 1260             | 0.10               | 7                  | 6640                                   | 10X12.5          |
|            | 1200                | 1512             | 0.10               | 7                  | 6640                                   | 10X12.5          |
|            | 1500                | 1890             | 0.10               | 7                  | 6640                                   | 10X12.5          |
|            | 2000                | 2520             | 0.10               | 7                  | 6640                                   | 10X12.5          |

SD- 升阳



Dimensions & Characteristics(尺寸及特性)

Ripple Current(mA.rms) at 105℃,100KHz

| W.V | Capacitance | LC. | tgδ | ESR | Maximum Permissible | Size |
|-----|-------------|-----|-----|-----|---------------------|------|
|-----|-------------|-----|-----|-----|---------------------|------|

| (V)       | (uF) | (uA,2min) | (120Hz,20℃) | (mΩ,100KHz) | Current(mA,rms) | ΦDXL(mm)         |
|-----------|------|-----------|-------------|-------------|-----------------|------------------|
| <u>10</u> | 180  | 360       | 0.07        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 220  | 440       | 0.08        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 270  | 540       | 0.08        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 330  | 660       | 0.08        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 390  | 780       | 0.08        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 470  | 940       | 0.08        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 560  | 1120      | 0.10        | 7           | 6100 / 5600     | 8X8 / 8X11.5     |
|           | 680  | 1360      | 0.10        | 7           | 5600 / 6100     | 8X11.5 / 10X12.5 |
|           | 820  | 1640      | 0.10        | 7           | 5600 / 6100     | 8X11.5 / 10X12.5 |
|           | 1000 | 2000      | 0.10        | 7           | 6100            | 10X12.5          |
|           | 1200 | 2400      | 0.10        | 7           | 6100            | 10X12.5          |
|           | 1500 | 3000      | 0.10        | 7           | 6100            | 10X12.5          |
| <u>16</u> | 180  | 576       | 0.10        | 7           | 5600            | 8X11.5           |
|           | 220  | 704       | 1.10        | 7           | 5600            | 8X11.5           |
|           | 270  | 864       | 2.10        | 7           | 5600            | 8X11.5           |
|           | 330  | 1056      | 3.1         | 7           | 5600            | 8X11.5           |
|           |      |           |             |             | 6100            | 10X12.5          |
|           | 390  | 1248      | 4.10        | 7           | 6100            | 10X12.5          |
|           | 470  | 1504      | 5.1         | 7           | 5600            | 8X11.5           |
|           |      |           |             |             | 6100            | 10X12.5          |
|           | 560  | 1792      | 6.10        | 7           | 6100            | 10X12.5          |
|           | 680  | 2176      | 7.10        | 7           | 6100            | 10X12.5          |
|           | 820  | 2624      | 8.10        | 7           | 6100            | 10X12.5          |