

**导针型-3.0V系列**  
**RADIALTYPE-3.0V SERIES**

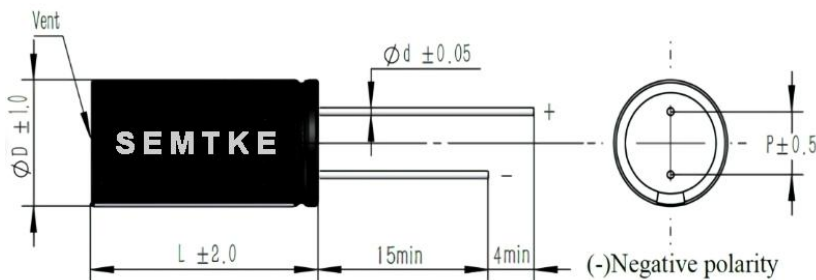
**超级电容器**  
**Electrical Double Layer Capacitor**

**典型应用 Typical Applications** **Data Sheet**

- 消费电子、UPS、智能仪表、汽车记录仪、玩具、程控交换机等。
- Consumer electronics, smart instruments, vehicle recorders, toys, UPS, program-controlled exchangers, watermeters, gas meters, etc.

**性能特点 Performance features**

| 规格 Specifications            | 特性 Characteristic   |
|------------------------------|---|
| 额定电压 Rated voltage           | 3.0 V. DC   |
| 浪涌电压 Surge voltage           | 3.15 V. DC  |
| 容量范围 Nominal Cap.Range       | 1F~120F   |
| 工作温度范围 Operating temperature | -40°C~+65°C   |
| 产品寿命 Life                    | 常温循环寿命：在25°C下，用恒定电流使电容器在规格电压和半额定电压间循环充放电50万次。容量衰减≤30%，内阻变化≤3倍。<br>at 25°C.>500.000 cycles,Capacity fade<30%, internal resistance variation <3 times<br>Cycle life at normal temperature: Capacitors charge- discharge between rated voltage & half voltage under constant current |
|                              | 高温耐久寿命：在+65°C条件下，施加额定电压1000小时。容量衰减≤30%，内阻变化≤3倍。<br>High-temperature durability: Apply rated voltage for 1,000 hours at +65°C<br>Capacity fade <30%, internalresistance variation <3 times   |



| Dimensions drawing (Unit:mm) |     |     |      |     |     |
|------------------------------|-----|-----|------|-----|-----|
| ΦD±1.0                       | 8   | 10  | 12.5 | 16  | 18  |
| P±0.5                        | 3.5 | 5.3 | 5.3  | 7.7 | 7.7 |
| Φd±0.05                      | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 |

| 产品编码<br>Codeno.      | 额定电压<br>Rated voltage<br>(V) | 标称容量<br>Nominal capacity<br>(F) | 尺寸(mm)<br>Dimension(mm)          |                        | 内阻<br>Internal resistanc | 最大工作<br>电流(A)<br>Maximum operating current<br>(A) | 最大峰值<br>电流(A)<br>Maximum peak current<br>(A) | 最大漏电<br>流(μA)<br>Maximum leakage current<br>(μA) | 最大能量<br>(wh)<br>Maximum energy<br>(wh) | 能量密度<br>(wh/kg)<br>Energy density<br>(wh/kg) | 功率密度<br>(kw/kg)<br>Power density<br>(kw/kg) |
|----------------------|------------------------------|---------------------------------|----------------------------------|------------------------|--------------------------|---|--|--|--|--|---|
|                      |                              |                                 | 外径(φD)<br>Outer diameter<br>(φD) | 高度(L)<br>Height<br>(L) | ESRAC<br>(1kHz/mΩ)       |   |  |  |  |  |   |
| SCD3R0S105C<br>01DSZ | 3.0                          | 1                               | 6.3                              | 12                     | 250                      | 0.18  | 0.68   | 3  | 0.0013                                 | 1.67   | 1.20  |
| SCD3R0S105C<br>02DSZ | 3.0                          | 1                               | 8                                | 12                     | 180                      | 0.26  | 0.83   | 5  | 0.0013                                 | 1.37   | 1.48  |
| SCD3R0S205C<br>02DSZ | 3.0                          | 2                               | 8                                | 12                     | 130                      | 0.26  | 1.15   | 6  | 0.0025                                 | 2.75   | 1.48  |
| SCD3R0S205C<br>03DSZ | 3.0                          | 2                               | 8                                | 16                     | 120                      | 0.43  | 1.74   | 8  | 0.0025                                 | 2.27   | 2.73  |
| SCD3R0S335C<br>04DSZ | 3.0                          | 3.3                             | 8                                | 20                     | 95                       | 0.53  | 2.53   | 10   | 0.0041                                 | 2.84   | 2.57  |
| SCD3R0S505C<br>04DSZ | 3.0                          | 5                               | 8                                | 20                     | 80                       | 0.59  | 3.41   | 12   | 0.0063                                 | 4.17   | 3.00  |
| SCD3R0S505C<br>06DSZ | 3.0                          | 5                               | 10                               | 20                     | 70                       | 0.77  | 3.95   | 15   | 0.0063                                 | 2.84   | 2.73  |
| SCD3R0V705C<br>05DSZ | 3.0                          | 7                               | 8                                | 25                     | 80                       | 0.71  | 4.38   | 18   | 0.0088                                 | 4.61   | 2.84  |
| SCD3R0V705C<br>06DSZ | 3.0                          | 7                               | 10                               | 20                     | 60                       | 0.81  | 4.95   | 18   | 0.0088                                 | 3.65   | 2.81  |
| SCD3R0V106C<br>06DSZ | 3.0                          | 10                              | 10                               | 20                     | 50                       | 0.94  | 6.82   | 18   | 0.0125                                 | 5.10   | 3.67  |
| SCD3R0V106C<br>07DSZ | 3.0                          | 10                              | 10                               | 25                     | 40                       | 1.27  | 8.33   | 20   | 0.0125                                 | 4.46   | 4.82  |
| SCD3R0V106C<br>09DSZ | 3.0                          | 10                              | 12.5                             | 20                     | 40                       | 1.35  | 8.57   | 25   | 0.0125                                 | 3.57   | 4.11  |
| SCD3R0V156C<br>09DSZ | 3.0                          | 15                              | 12.5                             | 20                     | 40                       | 1.35  | 10.59  | 30   | 0.0188                                 | 5.07   | 3.89  |
| SCD3R0V156C<br>10DSZ | 3.0                          | 15                              | 12.5                             | 25                     | 35                       | 1.54  | 10.98  | 35   | 0.0188                                 | 4.36   | 3.59  |
| SCD3R0V206C<br>10DSZ | 3.0                          | 20                              | 12.5                             | 25                     | 35                       | 1.66  | 13.64  | 50   | 0.0250                                 | 5.43   | 3.91  |
| SCD3R0V256C<br>12DSZ | 3.0                          | 25                              | 16                               | 20                     | 25                       | 1.90  | 16.67  | 70   | 0.0313                                 | 5.21   | 3.60  |

超级电容器是长寿命和高功率应用的首选技术，因为与电池相比，它们的使用寿命长、维护要求低、在寒冷天气下性能优越。

Ultracapacitors are the technology of choice for long life and high power applications because of their long operating lifetime, low maintenance requirements, and superior cold weather performance compared to batteries.

### 注意事项Cautions

下述注意事项需严格遵守。对于没有按照以下注意事项所造成的任何意外事故，晟驰易电子有限公司不负担任何责任。  
The warnings should be followed seriously, otherwise Semtke Electronic Company Limited is not responsible for any loss caused by misconduct.

- 超级电容器应在额定电压和规定工作温度区间使用，不宜超过65°C，并远离超过工作温度区间的热源；
  - 超级电容器在使用前需确认正/负极，禁止反向充电。若正负极接反，会降低超级电容器的充放电性能，并会导致发热、泄露和使用寿命快速衰减。
  - 超级电容器在使用前用干布对正/负极端子进行清洁，避免接触电阻过大降低超级电容使用性能。
  - 禁止将超级电容器投入火中或进行高压加热。
  - 禁止将超级电容直接与水、油、酸或碱接触。
  - 禁止挤压、钉刺和拆解超级电容器。
  - 禁止将带有0.5V以上电压的超级电容器进行正/负极短接；
  - 在使用或储存期间如发现超级电容器有散发气味、变色、变形或其它反常之处应停止使用。
  - 超级电容器所使用的电解液极易挥发，请不要随意分解超级电容器。
  - 超级电容器不能随意丢弃，需请根据国家环保标准进行处理。
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- The capacitor should be used in the rated voltage and specified operating temperature range with no more than 65 °C, and stay away from heat sources that exceed the operating temperature range;
  - The positive/negative electrodes of the capacitor must be confirmed before use, and reverse charging is prohibited. The reverse connection will reduce the performances of the capacitor and cause heat cause heat generation, leakage and rapid deterioration of service life;
  - Clean the positive/negative terminals with a dry cloth before use to avoid excessive contact resistance, which would degrade the performances of the capacitor;
  - Do not put the capacitor into fire or heat it under high pressure;
  - Do not contact directly the capacitor with water, oil, acid or alkali ;
  - Do not squeeze, prick and disassemble the capacitor;
  - Do not short-circuit the positive/negative electrodes of the capacitor with voltages above 0.5V;
  - Stop using the capacitor if it is found to emit odor, discoloration, deformation or other abnormalities during use or storage;
  - Do not disassemble the capacitor at will because the electrolyte is volatile;
  - Do not discard the capacitor at will, Please dispose of it according to nationa environmental protection standards.