

## Typical application 典型应用

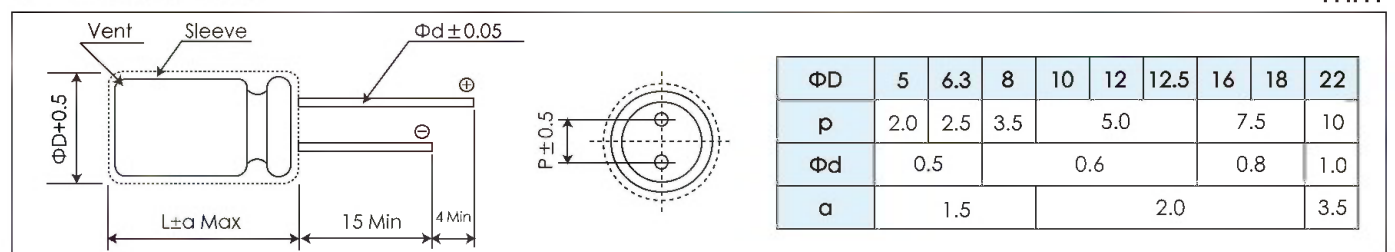
- Intelligent instruments: electronic meter, water meter, gas meter, hot meter  
智能仪表: 国网电表、水表、燃气表、热表
- Communication terminal: RTU/DTU, DTU, FTU, fault current indicator  
通讯终端: 智能测控终端、智能配电终端、智能馈线终端、故障指示器
- Auto electronics: auto recorder, auto door control, audio control, auto diagnosis system, wireless charging  
汽车电子: 汽车记录仪、汽车门控、音响控制、汽车诊断系统、无线充
- Energy storage: server backup power, motor drive, brake, charging pile, security, fire protection  
储能: 服务器备电、马达驱动、闸机、充电桩、安防、消防
- Consumer: Toys, robots, smart home, medical devices  
消费类: 玩具、机器人、智能家居、医疗器械



| Items<br>项目                          | Characteristics<br>特性                                                                                                                                                                                  |                                    |                                                                     |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------|
| Rated Voltage<br>额定电压                | 2.7 V                                                                                                                                                                                                  |                                    |                                                                     |
| Operating Temperature Rang<br>工作温度范围 | -40 ~ +70°C (-40 ~ +85°C @2.3V)                                                                                                                                                                        |                                    |                                                                     |
| Surge Voltage<br>浪涌电压                | 2.85V (≤1s,1次)                                                                                                                                                                                         |                                    |                                                                     |
| Capacitance Range<br>容量范围            | 0.5~180 F                                                                                                                                                                                              |                                    |                                                                     |
| Capacitance Tolerance<br>容差范围(25°C)  | -10~+30%                                                                                                                                                                                               |                                    |                                                                     |
| Temperature Characteristics<br>温度特性  | The specifications shall be met at category temperature of 70°C<br>在70°C时应满足的规范                                                                                                                        | Capacitance change<br>容量变化         | Within 10% of the initial value<br>在初始值的10%以内                       |
|                                      |                                                                                                                                                                                                        | ESR <sub>AC</sub> change<br>交流内阻变化 | Not more than the initial specified value<br>不超过初始规定值               |
|                                      | The specifications shall be met at category temperature of -40°C<br>在-40°C时应满足的规范                                                                                                                      | Capacitance change<br>容量变化         | Within 30% of the initial value<br>在初始值的30%以内                       |
|                                      |                                                                                                                                                                                                        | ESR <sub>AC</sub> change<br>交流内阻变化 | Not more than 4 times of the initial specified value<br>不超过初始规定值的4倍 |
| High Temperature Loaded<br>高温负荷      | The specifications shall be met after rated voltage applied at 70°C for 1000 hours<br>在70°C温度下, 以额定电压恒压1000h后, 应满足规范                                                                                   | Capacitance change<br>容量变化         | Within 30% of the initial value<br>在初始值的30%以内                       |
|                                      |                                                                                                                                                                                                        | ESR <sub>AC</sub> change<br>交流内阻变化 | Not more than 4 times of the initial specified value<br>不超过初始规定值的4倍 |
| High Temperature Storage<br>高温存储     | The specifications shall be met after storage at 70°C for 1000 hours<br>在70°C温度下, 不加电压储存1000h后, 应满足规范                                                                                                  | Capacitance change<br>容量变化         | Within 30% of the initial value<br>在初始值的30%以内                       |
|                                      |                                                                                                                                                                                                        | ESR <sub>AC</sub> change<br>交流内阻变化 | Not more than 2 times of the initial specified value<br>不超过初始规定值的2倍 |
| Cycle Life<br>循环寿命                   | The specifications shall be met after 500,000 cycles at 25°C, cycle of charge/discharge from V <sub>R</sub> to 1/2V <sub>R</sub><br>在25°C温度下, V <sub>R</sub> ~ 1/2V <sub>R</sub> 充放电循环500,000次后, 应满足规范 | Capacitance change<br>容量变化         | Within 30% of the initial value<br>在初始值的30%以内                       |
|                                      |                                                                                                                                                                                                        | ESR <sub>AC</sub> change<br>交流内阻变化 | Not more than 2 times of the initial specified value<br>不超过初始规定值的2倍 |

## Dimensions 尺寸

mm



## Ratings for SRP Series SRP 系列额定值

| U <sub>s</sub><br>(Surge Voltage)<br>Code<br>额定电压<br>(浪涌电压)<br>代码 | Rated Cap.<br>25°C<br>额定容量<br>25°C<br>(*) | Impedance<br>内阻           |                                     | Leakage Current<br>漏电流(72hrs) | Size<br>尺寸<br>ΦD×L | Weight<br>重量 | P/N<br>产品代码             |
|-------------------------------------------------------------------|-------------------------------------------|---------------------------|-------------------------------------|-------------------------------|--------------------|--------------|-------------------------|
|                                                                   |                                           | ESR <sub>DC</sub><br>直流内阻 | ESR <sub>AC</sub><br>交流内阻<br>(1KHz) |                               |                    |              |                         |
| (V)                                                               | (F)                                       | (mΩ)                      | (mΩ)                                | (mA)                          | (mm)               | (g)          | -                       |
| 2.7<br>(2.85)<br>2R7                                              | 0.5                                       | 900                       | 450                                 | 0.005                         | 5×12               | 0.40         | SCCDPR2R7504QRH050012EP |
|                                                                   | 0.8                                       | 700                       | 350                                 | 0.006                         | 6.3×12             | 0.66         | SCCDPR2R7804QRH063012EP |
|                                                                   | 1                                         | 400                       | 200                                 | 0.008                         | 8×12               | 0.85         | SCCDPR2R7105QRH080012EP |
|                                                                   | 1                                         | 400                       | 200                                 | 0.008                         | 8×14               | 0.90         | SCCDPR2R7105QRH080014EP |
|                                                                   | 2                                         | 280                       | 140                                 | 0.010                         | 8×14               | 1.00         | SCCDPR2R7205QRH080014EP |
|                                                                   | 3.3                                       | 180                       | 90                                  | 0.014                         | 8×20               | 1.43         | SCCDPR2R7335QRH080020EP |
|                                                                   | 5                                         | 180                       | 90                                  | 0.016                         | 8×25               | 1.70         | SCCDPR2R7505QRH080025EP |
|                                                                   | 5                                         | 120                       | 60                                  | 0.016                         | 10×20              | 2.10         | SCCDPR2R7505QRH100020EP |
|                                                                   | 7                                         | 130                       | 65                                  | 0.020                         | 10×20              | 2.20         | SCCDPR2R7705QRH100020EP |
|                                                                   | 7                                         | 110                       | 55                                  | 0.020                         | 10×25              | 2.70         | SCCDPR2R7705QRH100025EP |
|                                                                   | 10                                        | 90                        | 45                                  | 0.040                         | 10×25              | 2.80         | SCCDPR2R7106QRH100025EP |
|                                                                   | 10                                        | 80                        | 40                                  | 0.040                         | 10×30              | 3.20         | SCCDPR2R7106QRH100030EP |
|                                                                   | 10                                        | 80                        | 40                                  | 0.040                         | 12.5×20            | 3.40         | SCCDPR2R7106QRH125020EP |
|                                                                   | 10                                        | 80                        | 40                                  | 0.040                         | 12.5×25            | 3.60         | SCCDPR2R7106QRH125025EP |
|                                                                   | 15                                        | 60                        | 30                                  | 0.045                         | 12.5×25            | 4.30         | SCCDPR2R7156QRH125025EP |
|                                                                   | 20                                        | 50                        | 25                                  | 0.060                         | 16×20              | 5.90         | SCCDPR2R7206QRH160020ET |
|                                                                   | 25                                        | 44                        | 22                                  | 0.080                         | 16×25              | 7.40         | SCCDPR2R7256QRH160025ET |
|                                                                   | 30                                        | 36                        | 18                                  | 0.100                         | 16×30              | 8.40         | SCCDPR2R7306QRH160030EP |
|                                                                   | 40                                        | 36                        | 18                                  | 0.120                         | 16×35              | 9.90         | SCCDPR2R7406QRH160035ET |
|                                                                   | 50                                        | 32                        | 16                                  | 0.140                         | 18×40              | 13.6         | SCCDPR2R7506QRH180040ET |
|                                                                   | 60                                        | 32                        | 16                                  | 0.140                         | 18×40              | 13.6         | SCCDPR2R7606QRH180040ET |
|                                                                   | 70                                        | 36                        | 18                                  | 0.200                         | 18×50              | 16.9         | SCCDPR2R7706QRH180050ET |
|                                                                   | 100                                       | 36                        | 18                                  | 0.300                         | 18×60              | 16.9         | SCCDPR2R7107QRH180060ET |
|                                                                   | 100                                       | 32                        | 16                                  | 0.300                         | 22×45              | 22.5         | SCCDPR2R7107QRH220045EP |
|                                                                   | 120                                       | 32                        | 16                                  | 0.300                         | 22×45              | 22.5         | SCCDPR2R7127QRH220045EP |
|                                                                   | 180                                       | 32                        | 16                                  | 0.900                         | 22×55              | 27.0         | SCCDPR2R7187QRH220055EP |