



RZW系列

特长 / 用途

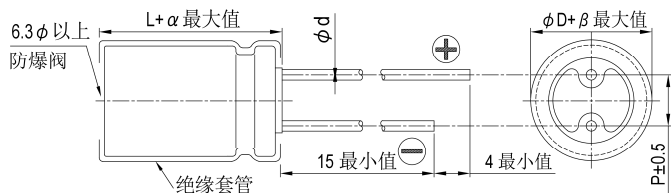
- 105℃, 4,000 ~ 10,000小时寿命保证
- 低等效串联电阻(ESR), 适用交换式电源供应器(UPS)
- 制品尺寸较小并可承受大纹波电流
- 符合RoHS指令



规格表

| 项目 | 性能 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------|---------------|----------|-------------|-------------|-----------------|---------------|------|------|---------|------|------|------|------|------|-----|------|------|------|------|--------|-----|-----|-----|-----|
| 工作温度范围 | -55℃ ~ +105℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 额定静电容量容许误差值 | ± 20% (120 Hz, 20℃) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流(20℃) | I = 0.01CV 或 3(μA/微安)之中任一较大值以下(2分钟后) 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) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值(120 Hz, 20℃) | <table border="1"> <tr> <th>额定电压</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <th>损失角正切值(最大值)</th> <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> </tr> </table> <p>当额定静电容量大于1,000 微法拉时, 每增加1,000 微法拉需加0.02。</p> | 额定电压 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 损失角正切值(最大值) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | | | | | | | | | | | | | |
| 额定电压 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值(最大值) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | | | | | | | | | | | | | | | | | | | | | | | |
| 温度特性(120 Hz) | <p>阻抗比不可大于下表所列数值</p> <table border="1"> <tr> <th>额定电压</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <th>阻抗比</th> <td>Z(-55℃)/Z(+20℃)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table> | 额定电压 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 阻抗比 | Z(-55℃)/Z(+20℃) | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | |
| 额定电压 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | | | | | | | | | | | | | | | | | | | | | | | |
| 阻抗比 | Z(-55℃)/Z(+20℃) | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 耐久性 | <table border="1"> <tr> <th rowspan="2">测试时间</th> <th>6.3 ~ 10V</th> <td>φD = 5 ~ 6.3 mm: 4,000小时; φD = 8 ~ 10 mm: 6,000小时; φD ≧ 12.5 mm: 8,000小时</td> </tr> <tr> <th>16 ~ 63V</th> <td>φD = 5 ~ 6.3 mm: 5,000小时; φD = 8 ~ 10 mm: 7,000小时; φD ≧ 12.5 mm: 10,000小时</td> </tr> <tr> <td colspan="2">静电容量变化率</td> <td>≦ 初始值的± 25%</td> </tr> <tr> <td colspan="2">损失角正切值</td> <td>≦ 初始规格值的 200%</td> </tr> <tr> <td colspan="2">漏电流</td> <td>≦ 初始规格值</td> </tr> </table> <p>* 于 105℃ 环境中供给容许纹波电流值与额定电压 4,000 ~ 10,000 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。</p> | 测试时间 | 6.3 ~ 10V | φD = 5 ~ 6.3 mm: 4,000小时; φD = 8 ~ 10 mm: 6,000小时; φD ≧ 12.5 mm: 8,000小时 | 16 ~ 63V | φD = 5 ~ 6.3 mm: 5,000小时; φD = 8 ~ 10 mm: 7,000小时; φD ≧ 12.5 mm: 10,000小时 | 静电容量变化率 | | ≦ 初始值的± 25% | 损失角正切值 | | ≦ 初始规格值的 200% | 漏电流 | | ≦ 初始规格值 | | | | | | | | | | | | | | | |
| 测试时间 | 6.3 ~ 10V | | φD = 5 ~ 6.3 mm: 4,000小时; φD = 8 ~ 10 mm: 6,000小时; φD ≧ 12.5 mm: 8,000小时 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 16 ~ 63V | φD = 5 ~ 6.3 mm: 5,000小时; φD = 8 ~ 10 mm: 7,000小时; φD ≧ 12.5 mm: 10,000小时 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静电容量变化率 | | ≦ 初始值的± 25% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值 | | ≦ 初始规格值的 200% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 | | ≦ 初始规格值 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 高温无负荷特性 | <table border="1"> <tr> <td>保证寿命时间</td> <td>1,000 小时</td> </tr> <tr> <td>静电容量变化率</td> <td>≦ 初始值的± 25%</td> </tr> <tr> <td>损失角正切值</td> <td>≦ 初始规格值的 200%</td> </tr> <tr> <td>漏电流</td> <td>≦ 初始规格值</td> </tr> </table> <p>* 于 105℃ 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。</p> | 保证寿命时间 | 1,000 小时 | 静电容量变化率 | ≦ 初始值的± 25% | 损失角正切值 | ≦ 初始规格值的 200% | 漏电流 | ≦ 初始规格值 | | | | | | | | | | | | | | | | | | | | | |
| 保证寿命时间 | 1,000 小时 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静电容量变化率 | ≦ 初始值的± 25% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值 | ≦ 初始规格值的 200% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 | ≦ 初始规格值 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 纹波电流与频率修正系数 | <table border="1"> <tr> <th rowspan="2">频率(Hz)</th> <th colspan="4">静电容量(μF/微法拉)</th> </tr> <tr> <th>≦ 33</th> <th>39 ~ 270</th> <th>330 ~ 680</th> <th>820 ~ 1,800</th> </tr> <tr> <td>120</td> <td>0.42</td> <td>0.50</td> <td>0.55</td> <td>0.6</td> </tr> <tr> <td>1k</td> <td>0.70</td> <td>0.73</td> <td>0.77</td> <td>0.80</td> </tr> <tr> <td>10k</td> <td>0.90</td> <td>0.92</td> <td>0.94</td> <td>0.96</td> </tr> <tr> <td>100k ≦</td> <td>1.0</td> <td>1.0</td> <td>1.0</td> <td>1.0</td> </tr> </table> | 频率(Hz) | 静电容量(μF/微法拉) | | | | ≦ 33 | 39 ~ 270 | 330 ~ 680 | 820 ~ 1,800 | 120 | 0.42 | 0.50 | 0.55 | 0.6 | 1k | 0.70 | 0.73 | 0.77 | 0.80 | 10k | 0.90 | 0.92 | 0.94 | 0.96 | 100k ≦ | 1.0 | 1.0 | 1.0 | 1.0 |
| 频率(Hz) | 静电容量(μF/微法拉) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ≦ 33 | 39 ~ 270 | 330 ~ 680 | 820 ~ 1,800 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120 | 0.42 | 0.50 | 0.55 | 0.6 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1k | 0.70 | 0.73 | 0.77 | 0.80 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10k | 0.90 | 0.92 | 0.94 | 0.96 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100k ≦ | 1.0 | 1.0 | 1.0 | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |

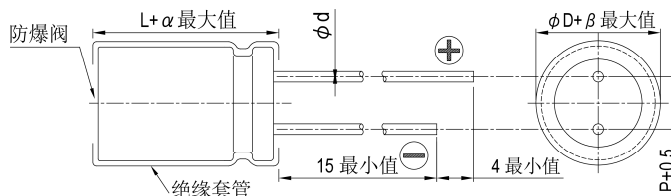
寸法图



制品各项寸法 单位: 毫米

| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|----|--------------------------|-----|-----|-----|------|-----|-----|
| P | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.5 | | 0.6 | | | 0.8 | |
| α | L < 20: 1.5, L ≧ 20: 2.0 | | | | | | |
| β | 0.5 | | | | | | |

制品尺寸如为 12.5×16、16×16、16×20、18×16、18×20、18×25 适用下列制品尺寸图:



引线型



尺寸: 直径(ϕD) \times 长度(L), (毫米/mm)
 容许纹波电流: 毫安/均方根值(mA/rms), 100k 赫兹(Hz), 105 $^{\circ}$ C
 阻抗值: 欧姆(Ω)/最大值, 100k 赫兹(Hz), 20 $^{\circ}$ C

制品尺寸与容许纹波电流一览表

| 内容 额定电压 V _{dc} 静电容量 (μ F/微法拉) | 6.3V (0J) | | | | 10V (1A) | | | | 16V (1C) | | | | 25V (1E) | | | |
|------------------------------------------------------|------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------------------------------------|-------------------------|-------------------------|-------------------------|------------------------------------------------------|-------------------------|-------------------------|-------------------------|
| | $\phi D \times L$ | 阻抗值 | | 纹波电流 100k Hz | $\phi D \times L$ | 阻抗值 | | 纹波电流 100k Hz | $\phi D \times L$ | 阻抗值 | | 纹波电流 100k Hz | $\phi D \times L$ | 阻抗值 | | 纹波电流 100k Hz |
| | | 20 $^{\circ}$ C | -10 $^{\circ}$ C | | | 20 $^{\circ}$ C | -10 $^{\circ}$ C | | | 20 $^{\circ}$ C | -10 $^{\circ}$ C | | | 20 $^{\circ}$ C | -10 $^{\circ}$ C | |
| 47 | | | | | | | | | | | | | 5 \times 11 | 0.58 | 1.16 | 210 |
| 56 | | | | | | | | | 5 \times 11 | 0.58 | 1.16 | 210 | | | | |
| 100 | | | | | 5 \times 11 | 0.58 | 1.16 | 210 | | | | | 6.3 \times 11 | 0.22 | 0.44 | 340 |
| 120 | | | | | | | | | 6.3 \times 11 | 0.22 | 0.44 | 340 | | | | |
| 150 | 5 \times 11 | 0.58 | 1.16 | 210 | | | | | | | | | | | | |
| 220 | | | | | 6.3 \times 11 | 0.22 | 0.44 | 340 | 8 \times 11.5 | 0.11 | 0.22 | 640 | 8 \times 11.5 | 0.11 | 0.22 | 640 |
| 330 | 6.3 \times 11 | 0.22 | 0.44 | 340 | | | | | 8 \times 11.5 | 0.11 | 0.22 | 640 | 8 \times 15 10 \times 12.5 | 0.083 0.080 | 0.166 0.160 | 840 865 |
| 470 | | | | | 8 \times 11.5 | 0.11 | 0.22 | 640 | 8 \times 15 10 \times 12.5 | 0.083 0.080 | 0.166 0.160 | 840 865 | 8 \times 20 10 \times 16 | 0.064 0.060 | 0.128 0.120 | 1,050 1,210 |
| 680 | 8 \times 11.5 | 0.11 | 0.22 | 640 | 8 \times 15 10 \times 12.5 | 0.083 0.080 | 0.166 0.160 | 840 865 | 8 \times 20 10 \times 16 | 0.064 0.060 | 0.128 0.120 | 1,050 1,210 | 10 \times 20 12.5 \times 16 | 0.046 0.049 | 0.092 0.098 | 1,400 1,450 |
| 820 | 10 \times 12.5 | 0.080 | 0.16 | 865 | | | | | | | | | 10 \times 25 | 0.042 | 0.084 | 1,650 |
| 1,000 | 8 \times 15 | 0.087 | 0.174 | 840 | 8 \times 20 10 \times 16 | 0.064 0.060 | 0.128 0.120 | 1,050 1,210 | 10 \times 20 12.5 \times 16 | 0.046 0.049 | 0.092 0.098 | 1,400 1,450 | 10 \times 30 12.5 \times 20 16 \times 16 | 0.031 0.035 0.042 | 0.062 0.070 0.084 | 1,910 1,900 1,940 |
| 1,200 | 8 \times 20 10 \times 16 | 0.069 0.060 | 0.128 0.120 | 1,050 1,210 | 10 \times 20 | 0.046 | 0.092 | 1,400 | 10 \times 25 | 0.042 | 0.084 | 1,650 | 18 \times 16 | 0.043 | 0.086 | 2,210 |
| 1,500 | 10 \times 20 | 0.046 | 0.092 | 1,400 | 10 \times 25 12.5 \times 16 | 0.042 0.049 | 0.084 0.090 | 1,650 1,450 | 10 \times 30 12.5 \times 20 16 \times 16 | 0.031 0.035 0.042 | 0.062 0.070 0.084 | 1,910 1,900 1,940 | 12.5 \times 25 | 0.027 | 0.054 | 2,230 |
| 1,800 | 12.5 \times 16 | 0.045 | 0.090 | 1,450 | | | | | | | | | 12.5 \times 30 16 \times 20 | 0.024 0.027 | 0.048 0.054 | 2,650 2,530 |
| 2,200 | 10 \times 25 | 0.042 | 0.084 | 1,650 | 10 \times 30 12.5 \times 20 16 \times 16 | 0.031 0.035 0.042 | 0.062 0.070 0.084 | 1,910 1,900 1,940 | 12.5 \times 25 18 \times 16 | 0.027 0.043 | 0.054 0.086 | 2,230 2,210 | 12.5 \times 35 18 \times 20 | 0.020 0.026 | 0.040 0.052 | 2,880 2,860 |
| 2,700 | 10 \times 30 16 \times 16 | 0.031 0.042 | 0.062 0.084 | 1,910 1,940 | 18 \times 16 | 0.043 | 0.086 | 2,210 | 12.5 \times 30 16 \times 20 | 0.024 0.027 | 0.048 0.054 | 2,650 2,530 | 12.5 \times 40 16 \times 25 | 0.017 0.021 | 0.034 0.042 | 3,350 2,930 |
| 3,300 | 12.5 \times 20 | 0.035 | 0.070 | 1,900 | 12.5 \times 25 | 0.027 | 0.054 | 2,230 | 12.5 \times 35 | 0.020 | 0.040 | 2,880 | 16 \times 31.5 18 \times 25 | 0.017 0.019 | 0.034 0.038 | 3,450 3,140 |
| 3,900 | 12.5 \times 25 18 \times 16 | 0.027 0.043 | 0.054 0.086 | 2,230 2,210 | 12.5 \times 30 16 \times 20 | 0.024 0.027 | 0.048 0.054 | 2,650 2,530 | 12.5 \times 40 16 \times 25 18 \times 20 | 0.017 0.021 0.026 | 0.034 0.042 0.052 | 3,350 2,930 2,860 | 16 \times 35.5 18 \times 31.5 | 0.015 0.015 | 0.030 0.030 | 3,610 4,170 |
| 4,700 | 12.5 \times 30 | 0.024 | 0.048 | 2,650 | 12.5 \times 35 | 0.020 | 0.040 | 2,880 | 16 \times 31.5 18 \times 25 | 0.017 0.019 | 0.034 0.038 | 3,450 3,140 | 16 \times 40 18 \times 35.5 | 0.013 0.014 | 0.026 0.028 | 4,080 4,220 |
| 5,600 | 12.5 \times 35 16 \times 20 | 0.020 0.027 | 0.040 0.054 | 2,880 2,530 | 12.5 \times 40 16 \times 25 18 \times 20 | 0.017 0.021 0.026 | 0.034 0.042 0.052 | 3,350 2,930 2,860 | 16 \times 35.5 18 \times 31.5 | 0.015 0.015 | 0.030 0.030 | 3,610 4,170 | 18 \times 40 | 0.012 | 0.024 | 4,280 |
| 6,800 | 12.5 \times 40 16 \times 25 18 \times 20 | 0.017 0.021 0.026 | 0.034 0.042 0.052 | 3,350 2,930 2,860 | 16 \times 31.5 18 \times 25 | 0.017 0.019 | 0.034 0.038 | 3,450 3,140 | 16 \times 40 | 0.013 | 0.026 | 4,080 | | | | |
| 8,200 | 16 \times 31.5 | 0.017 | 0.034 | 3,450 | 16 \times 35.5 18 \times 31.5 | 0.015 0.015 | 0.030 0.030 | 3,610 4,170 | 18 \times 35.5 | 0.014 | 0.028 | 4,220 | | | | |
| 10,000 | 16 \times 35.5 18 \times 25 | 0.015 0.019 | 0.030 0.038 | 3,610 3,140 | 16 \times 40 18 \times 35.5 | 0.013 0.014 | 0.026 0.028 | 4,080 4,220 | 18 \times 40 | 0.012 | 0.024 | 4,280 | | | | |
| 12,000 | 16 \times 40 18 \times 31.5 | 0.013 0.015 | 0.026 0.030 | 4,080 4,170 | 18 \times 40 | 0.012 | 0.024 | 4,280 | | | | | | | | |
| 15,000 | 18 \times 35.5 | 0.014 | 0.028 | 4,220 | | | | | | | | | | | | |
| 18,000 | 18 \times 40 | 0.012 | 0.024 | 4,280 | | | | | | | | | | | | |

引线型



尺寸: 直径(φD)×长度(L), (毫米/mm)
容许纹波电流: 毫安/均方根值(mA/rms), 100k 赫兹(Hz), 105℃
阻抗值: 欧姆(Ω)/最大值, 100k 赫兹(Hz), 20℃

制品尺寸与容许纹波电流一览表

Table with columns for rated voltage (35V, 50V, 63V), capacitance, impedance, and ripple current. Includes a vertical label '引线型' on the left side.

产品编码说明

RZW系列 470微法拉 ±20% 16V 长脚 8φ×15L 无铅引线与PET套管
RZW 471 M 1C BK - 0815
系列 额定静电容量 额定静电容量容许误差值 额定电压 引线加工/包装型式 胶盖型式 制品尺寸 制品引线与套管材质

注: 如需了解更详细介绍, 请参阅目录第 139 页"引线型产品编码说明"。