

RNG 系列

特长 / 用途

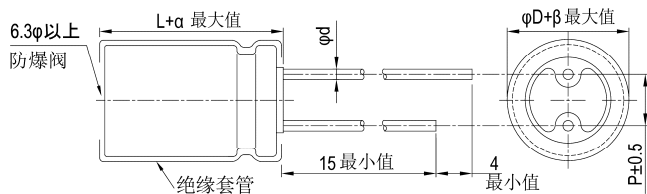
- 105℃、2,000小时寿命保证，一般用途之无极性品
- 适用于具有反向电压或不知极性之电路
- 符合RoHS指令



规格表

| 项 目 | 性 能 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|------------|------------|----------------------|----------------------|---------------|----------------------------------|--|------------|------------|----------------------|----------------------|--------------|------|-----------------|------|------|------|------|------|------|------|------|------|---|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|
| 工作温度范围 | -40℃ ~ +105℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 额定静电容量容许误差值 | ± 20% (120 Hz, 20℃) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流(20℃) | 额定电压 | <table border="1"> <tr> <td>≤ 100V</td> <td>> 100V</td> </tr> <tr> <td>测试时间</td> <td>2 分钟后</td> <td>5 分钟后</td> </tr> <tr> <td>漏电流</td> <td>I = 0.03CV 或 4(μA/微安) 中的任一个较大值以下</td> <td> <table border="1"> <tr> <td>CV ≤ 1,000</td> <td>CV > 1,000</td> </tr> <tr> <td>I = 0.03CV+15(μA/微安)</td> <td>I = 0.02CV+25(μA/微安)</td> </tr> </table> </td> </tr> </table> | ≤ 100V | > 100V | 测试时间 | 2 分钟后 | 5 分钟后 | 漏电流 | I = 0.03CV 或 4(μA/微安) 中的任一个较大值以下 | <table border="1"> <tr> <td>CV ≤ 1,000</td> <td>CV > 1,000</td> </tr> <tr> <td>I = 0.03CV+15(μA/微安)</td> <td>I = 0.02CV+25(μA/微安)</td> </tr> </table> | CV ≤ 1,000 | CV > 1,000 | I = 0.03CV+15(μA/微安) | I = 0.02CV+25(μA/微安) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ≤ 100V | > 100V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 测试时间 | 2 分钟后 | 5 分钟后 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| CV ≤ 1,000 | CV > 1,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I = 0.03CV+15(μA/微安) | I = 0.02CV+25(μA/微安) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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> <td>额定电压</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> </tr> <tr> <td>损失角正切值 (最大值)</td> <td>0.25</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.15</td> <td>0.15</td> <td>0.20</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 | 100 | 160 | 200 | 250 | 损失角正切值 (最大值) | 0.25 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.15 | 0.15 | 0.20 | | | | | | | | | | | | | | |
| 额定电压 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值 (最大值) | 0.25 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.15 | 0.15 | 0.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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> <td colspan="2">额定电压</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> </tr> <tr> <td rowspan="2">阻抗比</td> <td>Z(-25℃)/Z(+20℃)</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40℃)/Z(+20℃)</td> <td>8</td> <td>6</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table> | | 额定电压 | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 | 250 | 阻抗比 | Z(-25℃)/Z(+20℃) | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | Z(-40℃)/Z(+20℃) | 8 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 |
| 额定电压 | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 阻抗比 | Z(-25℃)/Z(+20℃) | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Z(-40℃)/Z(+20℃) | 8 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 耐久性 (于 105℃环境中供给额定电压，每 250 小时需反转极性。) | <table border="1"> <tr> <td>保证寿命时间</td> <td>2,000 小时</td> </tr> <tr> <td>静电容量变化率</td> <td>≦ 初始值的± 20%</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。</p> | | 保证寿命时间 | 2,000 小时 | 静电容量变化率 | ≦ 初始值的± 20% | 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 | 2,000 小时 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静电容量变化率 | ≦ 初始值的± 20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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± 20%</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。额定电压160 ~ 250V 需进行电压补偿后再行量测(依据JIS C 5101-4 4.1规定)。</p> | | 保证寿命时间 | 1,000 小时 | 静电容量变化率 | ≦ 初始值的± 20% | 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± 20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值 | ≦ 初始规格值的 200% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 | ≦ 初始规格值 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

寸法图



制品各项寸法

单位: 毫米

| | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|----|----------------------|-----|-----|-----|------|-----|-----|
| 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 | | | | | | |

无极性



尺寸: 直径(ϕ 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 $^{\circ}$ C

制品尺寸与容许纹波电流一览表

| 额定电压 V _{DC} 静电容量 (μ F/微法拉) | | 6.3V (0J) | | 10V (1A) | | 16V (1C) | | 25V (1E) | | 35V (1V) | | 50V (1H) | | 63V (1J) | | 100V (2A) | |
|--|-----|---------------------|-----|---------------------|-----|---------------------|-------|---------------------|-------|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|
| | | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA |
| 1 | 010 | | | | | | | | | | | 5 \times 11 | 10 | 5 \times 11 | 11 | 5 \times 11 | 12 |
| 2.2 | 2R2 | | | | | | | | | | | 5 \times 11 | 15 | 5 \times 11 | 16 | 6.3 \times 11 | 20 |
| 3.3 | 3R3 | | | | | | | | | | | 5 \times 11 | 18 | 5 \times 11 | 20 | 6.3 \times 11 | 25 |
| 4.7 | 4R7 | | | | | | | | | 5 \times 11 | 21 | 5 \times 11 | 22 | 6.3 \times 11 | 24 | 6.3 \times 11 | 30 |
| 10 | 100 | | | | | 5 \times 11 | 27 | 5 \times 11 | 27 | 5 \times 11 | 30 | 6.3 \times 11 | 37 | 6.3 \times 11 | 40 | 8 \times 11.5 | 50 |
| 22 | 220 | 5 \times 11 | 34 | 5 \times 11 | 34 | 5 \times 11 | 40 | 6.3 \times 11 | 46 | 6.3 \times 11 | 51 | 8 \times 11.5 | 63 | 8 \times 11.5 | 68 | 10 \times 16 | 97 |
| 33 | 330 | 5 \times 11 | F45 | 5 \times 11 | 45 | 5 \times 11 | 49 | 6.3 \times 11 | 56 | 8 \times 11.5 | 72 | 8 \times 11.5 | 77 | 10 \times 12.5 | 98 | 10 \times 20 | 140 |
| 47 | 470 | 5 \times 11 | 54 | 5 \times 11 | 54 | 6.3 \times 11 | 67 | 6.3 \times 11 | 67 | 8 \times 11.5 | 86 | 10 \times 12.5 | 105 | 10 \times 16 | 130 | 12.5 \times 20 | 170 |
| 100 | 101 | 6.3 \times 11 | 90 | 6.3 \times 11 | 90 | 8 \times 11.5 | 110 | 8 \times 11.5 | 110 | 10 \times 16 | 160 | 10 \times 20 | 190 | 12.5 \times 20 | 225 | 16 \times 25 | 300 |
| 220 | 221 | 8 \times 11.5 | 150 | 8 \times 11.5 | 150 | 10 \times 12.5 | 195 | 10 \times 16 | 215 | 12.5 \times 20 | 290 | 12.5 \times 25 | 340 | 16 \times 25 | 405 | 16 \times 35.5 | 510 |
| 330 | 331 | 8 \times 11.5 | 185 | 10 \times 16 | 240 | 10 \times 16 | 265 | 12.5 \times 20 | 320 | 12.5 \times 20 | 350 | 16 \times 25 | 460 | 16 \times 31.5 | 535 | | |
| 470 | 471 | 10 \times 12.5 | 260 | 10 \times 20 | 290 | 10 \times 20 | 345 | 12.5 \times 25 | 380 | 12.5 \times 25 | 465 | 16 \times 31.5 | 590 | 18 \times 35.5 | 680 | | |
| 1,000 | 102 | 10 \times 20 | 460 | 12.5 \times 20 | 510 | 12.5 \times 25 | 605 | 16 \times 25 | 670 | 16 \times 31.5 | 805 | | | | | | |
| 2,200 | 222 | 12.5 \times 25 | 820 | 16 \times 25 | 940 | 16 \times 31.5 | 1,070 | 18 \times 35.5 | 1,140 | | | | | | | | |

| 额定电压 V _{DC} 静电容量 (μ F/微法拉) | | 160V (2C) | | 200V (2D) | | 250V (2E) | |
|--|-----|---------------------|-----|---------------------|-----|---------------------|-----|
| | | ϕ D \times L | mA | ϕ D \times L | mA | ϕ D \times L | mA |
| 0.47 | R47 | 5 \times 11 | 8 | 5 \times 11 | 9 | 6.3 \times 11 | 10 |
| 1 | 010 | 6.3 \times 11 | 11 | 8 \times 11.5 | 12 | 8 \times 11.5 | 13 |
| 2.2 | 2R2 | 8 \times 11.5 | 18 | 8 \times 11.5 | 22 | 10 \times 12.5 | 26 |
| 3.3 | 3R3 | 8 \times 11.5 | 26 | 10 \times 12.5 | 30 | 10 \times 16 | 37 |
| 4.7 | 4R7 | 10 \times 12.5 | 31 | 10 \times 16 | 37 | 10 \times 20 | 50 |
| 10 | 100 | 10 \times 16 | 60 | 10 \times 20 | 66 | 10 \times 20 | 79 |
| 22 | 220 | 12.5 \times 20 | 117 | 12.5 \times 20 | 117 | 12.5 \times 25 | 138 |
| 33 | 330 | 12.5 \times 20 | 143 | 12.5 \times 25 | 158 | 16 \times 25 | 169 |
| 47 | 470 | 16 \times 25 | 188 | | | | |

产品编码说明

RNG系列 470微法拉 \pm 20% 6.3V 长脚 透气式 10 ϕ \times 12.5L 无铅引线与PET套管

RNG **471** **M** **0J** **BK** - **1012**

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 13 页“引线型产品编码说明”。

无极性