



小型铝电解电容器

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

YXF

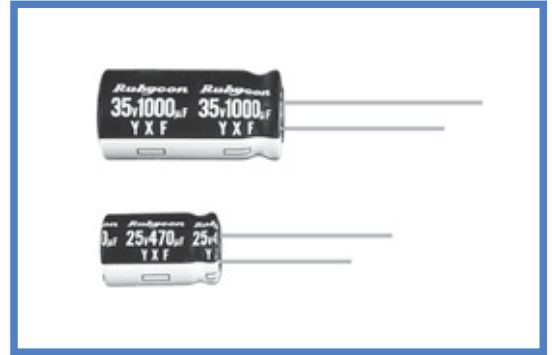
YXF 系列

SERIES

105°C长寿命低阻抗品
105°C Long Life. Low impedance.

◆特 长 / FEATURES

- 105°C、4000~10000小时品。
Load Life : 105°C 4000~10000 hours.
- 高频率阻抗规格设定。
Low impedance at 100kHz with selected materials.
- RoHS指令对应品
RoHS compliance.



◆规格表 / SPECIFICATIONS

| 项 目 Items | 特 性 Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------------------------------|---|------|----------------------|----------|----------|-----------------------------------|--|------|------------------|--------------------------|---|------|------|-------------------|----------------------|------|-----------|------------------|------|-------------|------|------|------------|------|-------|---|
| 工作温度范围 Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 额定电压范围 Rated Voltage Range | 6.3~100V.DC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静电容量允许差 Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏 电 流 Leakage Current(MAX) | <p>小于I=0.01CV和3µA中的较大值 (施加额定电压2分钟后) I=0.01CV or 3µA whichever is greater. (After 2 minutes)</p> <p>I=漏电流 (µA) C=额定静电容量 (µF) V=额定电压 (V) Leakage Current Rated Capacitance Rated Voltage</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损失角正切值(tan δ) Dissipation Factor(MAX) | <table border="1"> <thead> <tr> <th>额定电压 (V) Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <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> <td>0.08</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p> <p>对于额定静电容量超过1000µF的产品, 其静电容量每增加1000µF, 则损失角正切值在上表值的基础上加上0.02。 When rated capacitance is over 1000µF, tan δ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | 额定电压 (V) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | tan δ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | |
| 额定电压 (V) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | |
| tan δ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | | | |
| 耐 久 性 Endurance | <p>在105°C环境中, 不超过额定电压的范围内叠加额定纹波电流, 连续加载右表时间后, 满足以下各项要求。 After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.</p> <table border="1"> <thead> <tr> <th rowspan="2">静 电 容 量 变 化 率 Capacitance Change</th> <th colspan="2">初期值的±25%以内 Within ±25% of the initial value.</th> </tr> <tr> <th>时间(hrs) Life Time</th> <th>6.3~10WV</th> <th>16~100WV</th> </tr> </thead> <tbody> <tr> <td>损 失 角 正 切 值 Dissipation Factor</td> <td>规格值的200%以下 Not more than 200% of the specified value.</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>漏 电 流 Leakage Current</td> <td>规格值以下 Not more than the specified value.</td> <td>6000</td> <td>7000</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>铝壳尺寸 Case Size</th> <th colspan="2">时间(hrs) Life Time</th> </tr> </thead> <tbody> <tr> <td>φ D ≤ 6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>φ D = 8, 10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>φ D = 12.5</td> <td>8000</td> <td>10000</td> </tr> </tbody> </table> | 静 电 容 量 变 化 率 Capacitance Change | 初期值的±25%以内 Within ±25% of the initial value. | | 时间(hrs) Life Time | 6.3~10WV | 16~100WV | 损 失 角 正 切 值 Dissipation Factor | 规格值的200%以下 Not more than 200% of the specified value. | 4000 | 5000 | 漏 电 流 Leakage Current | 规格值以下 Not more than the specified value. | 6000 | 7000 | 铝壳尺寸 Case Size | 时间(hrs) Life Time | | φ D ≤ 6.3 | 4000 | 5000 | φ D = 8, 10 | 6000 | 7000 | φ D = 12.5 | 8000 | 10000 | |
| 静 电 容 量 变 化 率 Capacitance Change | 初期值的±25%以内 Within ±25% of the initial value. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 时间(hrs) Life Time | 6.3~10WV | 16~100WV | | | | | | | | | | | | | | | | | | | | | | | | | |
| 损 失 角 正 切 值 Dissipation Factor | 规格值的200%以下 Not more than 200% of the specified value. | 4000 | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏 电 流 Leakage Current | 规格值以下 Not more than the specified value. | 6000 | 7000 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 铝壳尺寸 Case Size | 时间(hrs) Life Time | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φ D ≤ 6.3 | 4000 | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φ D = 8, 10 | 6000 | 7000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| φ D = 12.5 | 8000 | 10000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 低 温 特 性 Low Temperature Stability (阻抗比) Impedance Ratio(MAX) | <table border="1"> <thead> <tr> <th>额定电压 (V) Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> <p>(120Hz)</p> | 额定电压 (V) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 |
| 额定电压 (V) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | |

◆纹波电流修正系数 / MULTIPLIER FOR RIPPLE CURRENT

频率系数 Frequency Coefficient

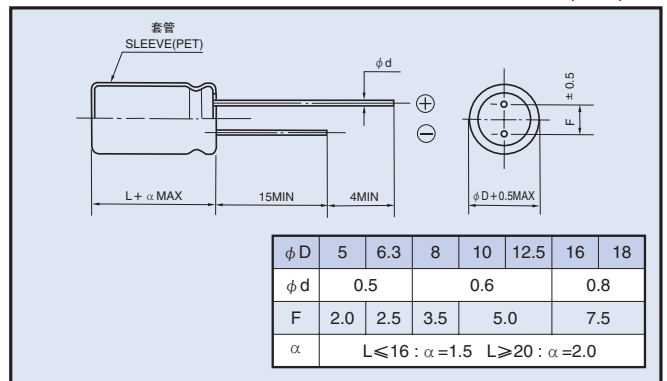
| 频率 (Hz) Frequency | 120 | 1k | 10k | 100k≤ |
|----------------------|------|------|------|-------|
| 0.47~10µF | 0.42 | 0.60 | 0.80 | 1.00 |
| 22~33µF | 0.55 | 0.75 | 0.90 | 1.00 |
| 47~330µF | 0.70 | 0.85 | 0.95 | 1.00 |
| 470~1000µF | 0.75 | 0.90 | 0.98 | 1.00 |
| 2200~15000µF | 0.80 | 0.95 | 1.00 | 1.00 |

◆副记号 / OPTION

| 记号 Code |
|---------------------------|
| PET套管 PET Sleeve EFC |

◆尺寸图 / DIMENSIONS

(mm)



◆产品型号体系 / PART NUMBER

| | | | | | | |
|-----------------------|----------------|-----------------------------|----------------------------------|---------------|------------------------|-------------------|
| □□□ | YXF | □□□□□ | M | □□□ | □□ | D × L |
| 额定电压 Rated Voltage | 系列名称 Series | 额定静电容量 Rated Capacitance | 静电容量允许差 Capacitance Tolerance | 副记号 Option | 引线加工记号 Lead Forming | 铝壳尺寸 Case Size |

◆标准品一览表 / STANDARD SIZE

| 额定电压 Rated Voltage (V · DC) | 额定静电容量 Rated capacitance (μF) | 外形尺寸 Size φ D×L(mm) | 额定纹波电流 Rated ripple current (mA r.m.s./105°C, 100kHz) | 阻抗 (Ω MAX) Impedance | |
|-----------------------------------|----------------------------------|---------------------------|---|-------------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 6.3 (0J) | 100 | 5×11 | 150 | 0.90 | 3.6 |
| | 220 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 330 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 470 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 1000 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 2200 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 3300 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 4700 | 16×25 | 1850 | 0.034 | 0.096 |
| | 6800 | 16×25 | 1850 | 0.034 | 0.096 |
| | 10000 | 16×31.5 | 2000 | 0.029 | 0.087 |
| 15000 | 18×35.5 | 2200 | 0.025 | 0.058 | |
| 10 (1A) | 100 | 5×11 | 150 | 0.90 | 3.6 |
| | 220 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 330 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 470 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 1000 | 10×16 | 770 | 0.12 | 0.46 |
| | 2200 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 3300 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 4700 | 16×25 | 1850 | 0.034 | 0.096 |
| | 6800 | 16×31.5 | 2000 | 0.029 | 0.087 |
| | 10000 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 16 (1C) | 47 | 5×11 | 150 | 0.90 | 3.6 |
| | 100 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 220 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 330 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 470 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 1000 | 10×20 | 1050 | 0.078 | 0.30 |
| | 2200 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 3300 | 16×25 | 1850 | 0.034 | 0.096 |
| | 4700 | 16×31.5 | 2000 | 0.029 | 0.087 |
| 6800 | 18×35.5 | 2200 | 0.025 | 0.058 | |
| 25 (1E) | 33 | 5×11 | 150 | 0.90 | 3.6 |
| | 47 | 5×11 | 150 | 0.90 | 3.6 |
| | 100 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 220 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 330 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 470 | 10×16 | 770 | 0.12 | 0.46 |
| | 1000 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 2200 | 16×25 | 1850 | 0.034 | 0.096 |
| | 3300 | 16×31.5 | 2000 | 0.029 | 0.087 |
| | 4700 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 35 (1V) | 33 | 5×11 | 150 | 0.90 | 3.6 |
| | 47 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 100 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 220 | 10×12.5 | 580 | 0.16 | 0.65 |
| | 330 | 10×16 | 770 | 0.12 | 0.46 |
| | 470 | 10×20 | 1050 | 0.078 | 0.30 |
| | 1000 | 12.5×25 | 1650 | 0.048 | 0.16 |
| | 2200 | 16×31.5 | 2000 | 0.029 | 0.087 |
| 3300 | 18×35.5 | 2200 | 0.025 | 0.058 | |

| 额定电压 Rated Voltage (V · DC) | 额定静电容量 Rated capacitance (μF) | 外形尺寸 Size φ D×L(mm) | 额定纹波电流 Rated ripple current (mA r.m.s./105°C, 100kHz) | 阻抗 (Ω MAX) Impedance | |
|-----------------------------------|----------------------------------|---------------------------|---|-------------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 50 (1H) | 0.47 | 5×11 | 17 | 5.5 | 12.0 |
| | 1 | 5×11 | 30 | 4.0 | 8.0 |
| | 2.2 | 5×11 | 43 | 2.5 | 6.0 |
| | 3.3 | 5×11 | 53 | 2.2 | 5.6 |
| | 4.7 | 5×11 | 88 | 1.9 | 5.0 |
| | 10 | 5×11 | 100 | 1.5 | 4.0 |
| | 22 | 5×11 | 150 | 0.90 | 3.6 |
| | 33 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 47 | 6.3×11 | 250 | 0.40 | 1.6 |
| | 100 | 8×11.5 | 400 | 0.25 | 1.0 |
| | 220 | 10×16 | 770 | 0.12 | 0.46 |
| | 330 | 10×20 | 1050 | 0.078 | 0.30 |
| | 470 | 12.5×20 | 1300 | 0.062 | 0.21 |
| | 1000 | 16×25 | 1850 | 0.034 | 0.096 |
| | 2200 | 18×35.5 | 2200 | 0.025 | 0.058 |
| 63 (1J) | 10 | 5×11 | 87 | 2.3 | 9.3 |
| | 22 | 6.3×11 | 140 | 1.3 | 5.2 |
| | 33 | 6.3×11 | 140 | 1.2 | 5.0 |
| | 47 | 8×11.5 | 210 | 0.63 | 2.8 |
| | 100 | 10×12.5 | 300 | 0.43 | 1.8 |
| | 220 | 10×20 | 520 | 0.21 | 0.84 |
| | 330 | 12.5×20 | 660 | 0.16 | 0.64 |
| | 470 | 12.5×25 | 750 | 0.12 | 0.45 |
| | 1000 | 16×31.5 | 1390 | 0.054 | 0.20 |
| 100 (2A) | 0.47 | 5×11 | 15 | 6.0 | 17.0 |
| | 1 | 5×11 | 20 | 4.5 | 15.0 |
| | 2.2 | 5×11 | 30 | 3.0 | 13.0 |
| | 3.3 | 5×11 | 40 | 2.7 | 11.0 |
| | 4.7 | 5×11 | 65 | 2.5 | 10.0 |
| | 10 | 6.3×11 | 140 | 1.2 | 5.0 |
| | 22 | 8×11.5 | 160 | 0.63 | 2.8 |
| | 33 | 10×12.5 | 230 | 0.43 | 1.8 |
| | 47 | 10×16 | 290 | 0.31 | 1.5 |
| | 100 | 12.5×20 | 430 | 0.16 | 0.64 |
| | 220 | 16×25 | 900 | 0.073 | 0.27 |
| | 330 | 16×25 | 900 | 0.073 | 0.27 |