# 中高压陶瓷电容器-LD 系列(低损耗)规格书

## 特点

■电容器容量范围从 220pF 到 4700pF。

■工作温度：-25℃～125℃

■储存温度：15℃~35℃

■陶瓷材质的介电损耗很小，因此允许降低热散逸。

■阻燃环氧树脂(UL94V-0)。

■Y5R/BN 材质是经欧盟批准豁免的含铅产品。

## 用途

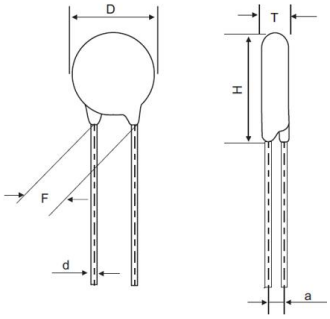
■适用于高频脉冲电路上，如 CTV 的水平谐振电路和开关电源的缓冲电路。

料号与订货信息请咨询。

## 技术要求

| | |
|---|---|
| 电容量 (C) 和介质损耗测试条件 | 25℃、1±0.1KHz、1.0Vrms |
| 介质损耗 | BN: ≤0.5%<br>Y5R: ≤0.2% |
| 额定电压 | 1000VDC、2000VDC、3150VDC |
| 耐电压 | $1.5U_R$+500V(DC) |
| 绝缘电阻 | $C_R$≤25nF，≥4000MΩ<br>$C_R$＞25nF，Rj·CR≥100s |
| 温度特性 | BN、Y5R |

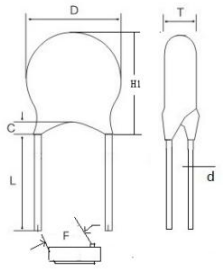
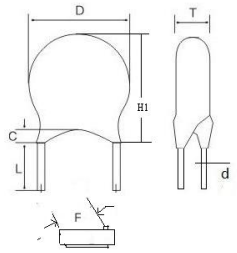
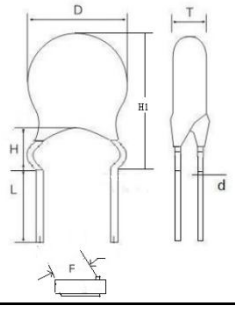
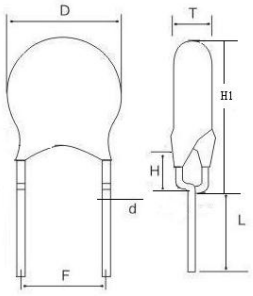
## 外形尺寸 (mm)



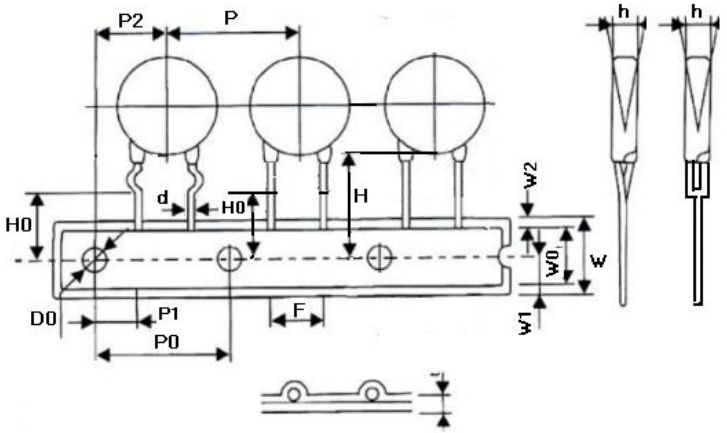
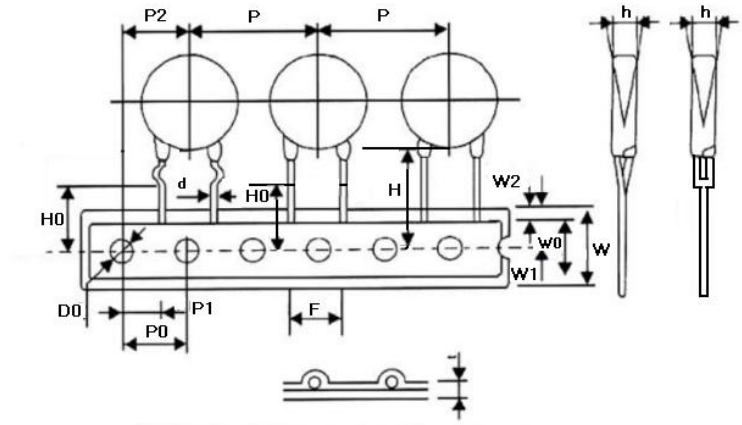

| 规格 (Y5R 系列) | | 尺寸(mm) | | | | 规格 (BN 系列) | | 尺寸(mm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D ±1.0. | T ±1.0. | F±0.8 | d±0.05 | | | D ±1.0. | T ±1.0. | F±0.8 | d±0.05 |
| 1KV | 221K | 5.5 | 2.5 | 5.0 | 0.5 | 1KV | 471K | 5.5 | 2.5 | 5.0 | 0.5 |
| | 331K | 5.5 | 2.5 | 5.0 | 0.5 | | 681K | 5.5 | 2.5 | 5.0 | 0.5 |
| | 471K | 5.5 | 2.5 | 5.0 | 0.5 | | 102K | 6.0 | 2.5 | 5.0 | 0.5 |
| | 681K | 6.0 | 2.5 | 5.0 | 0.5 | | 152K | 6.5 | 2.5 | 5.0 | 0.5 |
| | 102K | 7.0 | 2.5 | 5.0 | 0.5 | | 222K | 8.0 | 2.5 | 5.0 | 0.5 |
| | 152K | 8.5 | 2.5 | 5.0 | 0.5 | | 332K | 11.0 | 2.5 | 5.0 | 0.5 |
| | 222K | 11.0 | 2.5 | 5.0 | 0.5 | | 472K | 13.0 | 2.5 | 5.0 | 0.5 |
| | 332K | 13.0 | 2.5 | 5.0 | 0.5 | | / | / | / | / | / |
| | 472K | 16.0 | 2.5 | 5.0 | 0.5 | | / | / | / | / | / |
| 2KV | 221K | 5.5 | 3.0 | 5.0 | 0.5 | 2KV | 221K | 5.5 | 3.0 | 5.0 | 0.5 |
| | 271K | 6.0 | 3.0 | 5.0 | 0.5 | | 271K | 5.5 | 3.0 | 5.0 | 0.5 |
| | 331K | 6.5 | 3.0 | 5.0 | 0.5 | | 331K | 5.5 | 3.0 | 5.0 | 0.5 |
| | 391K | 6.5 | 3.0 | 5.0 | 0.5 | | 391K | 5.5 | 3.0 | 5.0 | 0.5 |
| | 471K | 7.0 | 3.0 | 5.0 | 0.5 | | 471K | 5.5 | 3.0 | 5.0 | 0.5 |
| | 561K | 8.0 | 3.0 | 5.0 | 0.5 | | 561K | 6.0 | 3.0 | 5.0 | 0.5 |
| | 681K | 8.0 | 3.0 | 5.0 | 0.5 | | 681K | 6.5 | 3.0 | 5.0 | 0.5 |
| | 821K | 9.0 | 3.0 | 5.0 | 0.5 | | 821K | 7.0 | 3.0 | 5.0 | 0.5 |
| | 102K | 9.0 | 3.0 | 5.0 | 0.5 | | 102K | 8.0 | 3.0 | 5.0 | 0.5 |
| | 122K | 10.0 | 3.0 | 7.5 | 0.6 | | 122K | 8.0 | 3.0 | 7.5 | 0.6 |
| | 152K | 11.0 | 3.0 | 7.5 | 0.6 | | 152K | 9.0 | 3.0 | 7.5 | 0.6 |
| | 182K | 12.0 | 3.0 | 7.5 | 0.6 | | 182K | 10.0 | 3.0 | 7.5 | 0.6 |
| | 222K | 13.0 | 3.0 | 7.5 | 0.6 | | 222K | 11.0 | 3.0 | 7.5 | 0.6 |
| | 272K | 14.5 | 3.0 | 7.5 | 0.6 | | 272K | 12.0 | 3.0 | 7.5 | 0.6 |
| | 332K | 16.0 | 3.0 | 7.5 | 0.6 | | 332K | 13.0 | 3.0 | 7.5 | 0.6 |
| | 392K | 17.5 | 3.0 | 7.5 | 0.6 | | 392K | 14.5 | 3.0 | 7.5 | 0.6 |
| | 472K | 19.0 | 3.0 | 7.5 | 0.6 | | 472K | 15.0 | 3.0 | 7.5 | 0.6 |

| 规格 (Y5R 系列) | | 尺寸(mm) | | | | 规格 (BN 系列) | | 尺寸(mm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D ±1.0. | T ±1.0. | F±0.8 | d±0.05 | | | D ±1.0. | T ±1.0. | F±0.8 | d±0.05 |
| 3KV | 151K | 6.0 | 3.5 | 7.5 | 0.6 | 3KV | 151K | 6.0 | 3.5 | 7.5 | 0.6 |
| | 181K | 6.0 | 3.5 | 7.5 | 0.6 | | 181K | 6.0 | 3.5 | 7.5 | 0.6 |
| | 221K | 7.0 | 3.5 | 7.5 | 0.6 | | 221K | 6.0 | 3.5 | 7.5 | 0.6 |
| | 271K | 7.0 | 3.5 | 7.5 | 0.6 | | 271K | 6.0 | 3.5 | 7.5 | 0.6 |
| | 331K | 8.0 | 3.5 | 7.5 | 0.6 | | 331K | 6.5 | 3.5 | 7.5 | 0.6 |
| | 391K | 8.0 | 3.5 | 7.5 | 0.6 | | 391K | 7.0 | 3.5 | 7.5 | 0.6 |
| | 471K | 9.0 | 3.5 | 7.5 | 0.6 | | 471K | 7.0 | 3.5 | 7.5 | 0.6 |
| | 561K | 9.0 | 3.5 | 7.5 | 0.6 | | 561K | 8.0 | 3.5 | 7.5 | 0.6 |
| | 681K | 10.0 | 3.5 | 7.5 | 0.6 | | 681K | 8.0 | 3.5 | 7.5 | 0.6 |
| | 821K | 11.0 | 3.5 | 7.5 | 0.6 | | 821K | 9.0 | 3.5 | 7.5 | 0.6 |
| | 102K | 12.5 | 3.5 | 7.5 | 0.6 | | 102K | 10.0 | 3.5 | 7.5 | 0.6 |
| | 122K | 13.5 | 3.5 | 7.5 | 0.6 | | 122K | 11.0 | 3.5 | 7.5 | 0.6 |
| | 152K | 14.5 | 3.5 | 7.5 | 0.65 | | 152K | 12.0 | 3.5 | 7.5 | 0.6 |
| | 182K | 16.5 | 3.5 | 7.5 | 0.65 | | 182K | 12.0 | 3.5 | 7.5 | 0.6 |
| | 222K | 17.5 | 3.5 | 7.5 | 0.65 | | 222K | 13.0 | 3.5 | 7.5 | 0.6 |
| | 272K | 19.5 | 3.5 | 7.5 | 0.65 | | 272K | 15.0 | 3.5 | 7.5 | 0.65 |

## 脚型、脚长说明

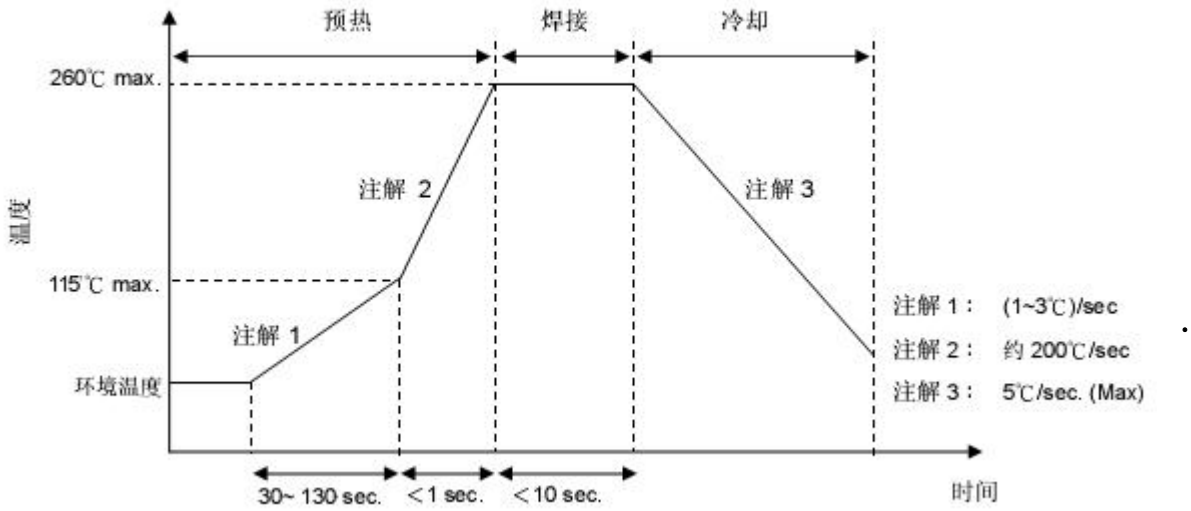
| 脚型 | 图示 | 脚长 L (mm) | 包封脚长 C (mm) |
|---|---|---|---|
| 长直脚脚型 |  | 16.0 min | ①C≤2.5mm<br>(成品直径＜12mm)<br><br>②C≤3.0mm<br>(成品直径≥12mm) |
| 短直脚脚型 |  | ①[2.5≤L＜6.0]+/-0.5;<br>②[6.0≤L≤10]+/-1.0 | ①C≤2.5mm<br>(成品直径＜12mm)<br><br>②C≤3.0mm<br>(成品直径≥12mm) |
| 单外弯脚型 |  | ①[2.5≤L＜6.0]+/-0.5;<br>②[6.0≤L≤10]+/-1.0 | 包封脚不超过弯点 |
| 前后翘脚型 |  | ①[2.5≤L＜6.0]+/-0.5;<br>②[6.0≤L≤10]+/-1.0 | Not exceed the bend point |

# 编带尺寸 (mm)

<table>
<tr><td rowspan="2">图示</td><td colspan="2">Fig.1</td><td colspan="2">Fig.2</td></tr>
<tr><td>代码</td><td colspan="2">P=5.0</td><td colspan="2">P=7.5</td></tr>
<tr><td rowspan="9">
</td><td>Po</td><td colspan="2">12.7±0.3</td><td colspan="2">12.7±0.3</td></tr>
<tr><td>P</td><td colspan="2">12.7±1.0</td><td colspan="2">25.4±1.0</td></tr>
<tr><td>P1</td><td colspan="2">3.85±0.7</td><td colspan="2">8.95±0.7</td></tr>
<tr><td>P2</td><td colspan="2">6.35±1.3</td><td colspan="2">12.7±1.3</td></tr>
<tr><td>F</td><td colspan="2">5±0.8</td><td colspan="2">7.5±0.8</td></tr>
<tr><td>Δh</td><td colspan="2">0±2.0</td><td colspan="2">0±2.0</td></tr>
<tr><td>W</td><td colspan="2">18.0+1.5/-1.0</td><td colspan="2">18.0 +1.5/-1.0</td></tr>
<tr><td>Wo</td><td colspan="2">10.5 Max</td><td colspan="2">10.5 Max</td></tr>
<tr><td>W1</td><td colspan="2">9.0+0.75/-0.5</td><td colspan="2">9.0+0.75/-0.5</td></tr>
<tr><td>Fig.1 (P=5.0)</td><td>W2</td><td colspan="2">3.0 Max</td><td colspan="2">3.0 Max</td></tr>
<tr><td rowspan="11">
</td><td>Do</td><td colspan="2">4.0±0.2</td><td colspan="2">4.0±0.2</td></tr>
<tr><td>H</td><td colspan="2">20+1.5/-1.0</td><td colspan="2">20+1.5/-1.0</td></tr>
<tr><td>Ho</td><td colspan="2">16.5&17.0&19.0<br>+1.5/-1.0</td><td colspan="2">16.5&17.0&19.0<br>+1.5/-1.0</td></tr>
<tr><td rowspan="2">L</td><td>直脚<br>脚型</td><td>弯脚<br>脚型</td><td>直脚<br>脚型</td><td>弯脚<br>脚型</td></tr>
<tr><td>11.0<br>Max</td><td>9.0<br>Max</td><td>11.0<br>Max</td><td>9.0<br>Max</td></tr>
<tr><td>t1</td><td colspan="2">0.5±0.2</td><td colspan="2">0.5±0.2</td></tr>
<tr><td>Fig.2 (P=7.5 )</td><td>t2</td><td colspan="2">1.7 Max</td><td colspan="2">1.7 Max</td></tr>
</table>

## 焊接条件：

**波峰焊曲线**




## 烙铁重工焊接条件

| 项目 | 条件 |
|---|---|
| 烙铁头部温度 | 350℃(max.) |
| 焊接时间 | 3 sec(max.) |
| 焊接位置与涂装层距离 | 2 mm(min.) |

## 储存环境要求

■ 由于大气中存在氢氯化物、氢硫化物、硫酸物质等，所以产品储存在大气中，必须注意引出端的可焊性变差。

■ 产品不能暴露在高温和高湿状态，必须保存在以下环境中：（在不拆开原包装的基础上）

A、温度：≤35℃

B、湿度：≤70%RH

C、保存时间：不超过 12 个月（从产品包装或产品本体上的日期算起）