



### 产品特征

容量范围：0.5pF~330μF

电压范围：4V~3KV

外形尺寸：0805~2225

分 规 范：GB/T 5967-2011《电子设备用固定电容器第8-1部分：1类瓷介固定电容器评定水平EZ》

GB/T 5969-2012《电子设备用固定电容器第9-1部分：2类瓷介固定电容器评定水平EZ》

### » 预定用途

典型应用于消费电子、汽车电子、通讯、医疗、工业等领域的电子设备等，常见用途包括定时、调谐、滤波、去耦、旁路、瞬态抑制等。

### » 选用示例

| CL<br>系列            | 0805<br>尺寸                   | CG<br>温度特性 | 100V<br>额定电压                                            | 101<br>标称容量 | J<br>精度                                                                      | H<br>引脚形式                            |
|---------------------|------------------------------|------------|---------------------------------------------------------|-------------|------------------------------------------------------------------------------|--------------------------------------|
| 1类<br>引线多层<br>瓷介电容器 | 0805<br>1206<br>1210<br>1812 | CG         | 4V 6.3V<br>10V 16V<br>25V 50V<br>100V 200V<br>250V 500V | 三位数表示法      | $<10\text{pF}$<br>$D=\pm 0.50\text{pF}$<br>$\geq 10\text{pF}$<br>$J=\pm 5\%$ | S: $5.08\pm 0.2$<br>L: $2.54\pm 0.2$ |
| 2类<br>引线多层<br>瓷介电容器 | 1812<br>2225                 | X7R<br>X5R | 630V 1KV<br>2KV 3KV                                     |             | $K=\pm 10\%$<br>$M=\pm 20\%$                                                 |                                      |

\*无特殊说明时，包装方式默认为T，如无特殊要求不填写

### » 外形尺寸

外形尺寸(以所选用的电容器芯片尺寸代码作为该电容器的外形代码)

单位：mm

| 外形代码   | 0805          | 0805          | 1206          | 1210          | 1812           | 2225           |
|--------|---------------|---------------|---------------|---------------|----------------|----------------|
| Wmax   | 4.85          | 4.85          | 5.86          | 5.86          | 7.14           | 8.62           |
| Hmax   | 4.16          | 4.16          | 4.36          | 4.80          | 6.00           | 8.62           |
| Tmax   | 3.70          | 3.70          | 4.10          | 4.20          | 4.20           | 4.20           |
| F      | $2.54\pm 0.1$ | $5.08\pm 0.1$ | $5.08\pm 0.1$ | $5.08\pm 0.1$ | $5.08\pm 0.12$ | $5.08\pm 0.12$ |
| d      | $0.5\pm 0.05$ | $0.5\pm 0.05$ | $0.5\pm 0.05$ | $0.5\pm 0.05$ | $0.6\pm 0.05$  | $0.6\pm 0.05$  |
| 腿长Lmin | 25.4          | 25.4          | 25.4          | 25.4          | 25.4           | 25.4           |
| 外形图    |               |               |               |               |                |                |
| 腿形代号   | L<br>直腿       | H<br>标准腿      | H<br>标准腿      | H<br>标准腿      | H<br>标准腿       | H<br>标准腿       |

说明：如需特别小颗粒的产品请附图联系特制。

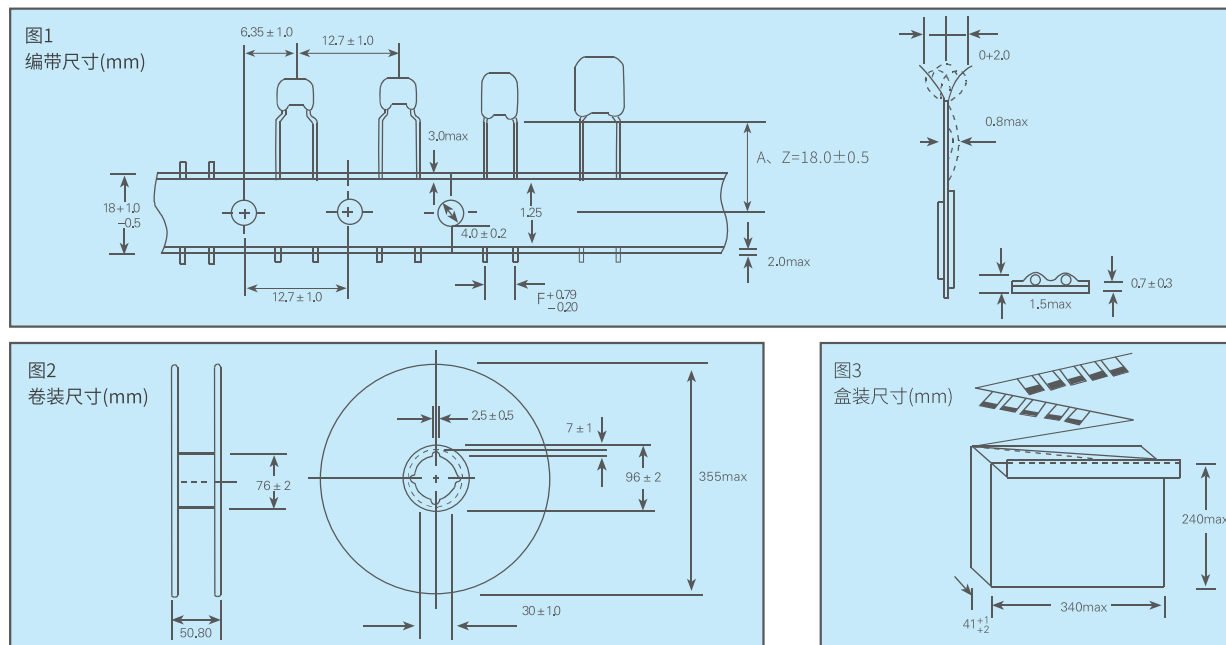
## » 包装方式

T=塑料袋散装

A=卷装编带包装(详见图1、图2)

Z=盒装折叠编带包装(详见图1、图3)

注: 无特别说明时, 包装方式默认为T, 如无特殊要求不填写。



## » 电性能指标及测试条件

|                                       |      | CG                                                                                                                                                                                                                            | X7R | X5R |
|---------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| 类别                                    | 温度特性 | (0±30) ppm/°C                                                                                                                                                                                                                 |     |     |
|                                       | 温度范围 | -55°C~125°C                                                                                                                                                                                                                   |     |     |
| 损耗角正切值 (tg δ)<br>C <sub>R</sub> 单位:pF | 指标   | $C_R \leq 30\text{pF}$ $\text{tg } \delta \leq \frac{1}{(400+20C_R)}$<br>$C_R > 30\text{pF}$ $\text{tg } \delta \leq 10 \times 10^{-4}$                                                                                       |     |     |
|                                       | 测试条件 | $C_R \leq 1000\text{pF}$ 1MHz±10% 1V±0.2V(有效值)<br>$C_R > 1000\text{pF}$ 1kHz±10% 1V±0.2V(有效值)                                                                                                                                 |     |     |
| 介质耐电压                                 | 测试条件 | $U_R \leq 100\text{V}$ , 2.5 $U_R$<br>$100\text{V} < U_R \leq 200\text{V}$ , 1.5 $U_R$ +100V<br>$200\text{V} < U_R \leq 500\text{V}$ , 1.3 $U_R$ +100V<br>$U_R > 500\text{V}$ , 1.3 $U_R$<br>测试时间: 5s。<br>注: 充电/放电电流应小于50毫安。* |     |     |
| 绝缘电阻 (IR)<br>C <sub>R</sub> 单位:μF     | 指标   | $C_R \leq 0.01\mu\text{F}$ , IR≥10GΩ<br>$C_R > 0.01\mu\text{F}$ , IR≥100MΩ·μF                                                                                                                                                 |     |     |
|                                       | 测试条件 | 1)测试温度: 20±2°C;<br>2)相对湿度: ≤70%;<br>3)测试电压: 对于 $U_R \leq 500\text{V}$ , 测试电压为 $U_R$ ;<br>对于 $U_R > 500\text{V}$ , 测试电压为500V;<br>4)测试时间: 60s±5s;<br>注: 充电电流应小于50毫安。                                                            |     |     |

注: 容量大于等于1μF的X7R、X5R产品, 损耗角正切值 $\text{tg } \delta \leq 1000 \times 10^{-4}$ 

部分极限X7R、X5R产品, 绝缘电阻和损耗角正切指标请以产品规格书为准或咨询火炬电子4008878799

### 容量范围

1类

[illegible] CG

### 容量范围

2类

[illegible]

\*DF(损耗角正切)最大值按12.5%控制

 X7R  
 X5R

- 要了解最大容量及更详细技术参数，请联络火炬电子。
- 外形尺寸的优选建议：相同的容量、耐压、精度，选用较小尺寸的规格，供货期短、价格较优。
- 0805与1206规格同样能满足要求的，请选用0805规格。
- 厚度特殊要求，请咨询火炬电子4008-878799。

容量范围

2类

| 外形尺寸        |      | 1812 |    |    |    |    |     |     |     |     |     |    |    | 2225 |    |     |     |     |     |     |    |    |    |  |  |
|-------------|------|------|----|----|----|----|-----|-----|-----|-----|-----|----|----|------|----|-----|-----|-----|-----|-----|----|----|----|--|--|
| 引脚形式        |      | H    |    |    |    |    |     |     |     |     |     |    |    | H    |    |     |     |     |     |     |    |    |    |  |  |
| 额定电压(V)     |      | 6.3  | 10 | 16 | 25 | 50 | 100 | 200 | 250 | 500 | 630 | 1k | 2k | 3k   | 50 | 100 | 200 | 250 | 500 | 630 | 1k | 2k | 3k |  |  |
| cap<br>(pF) | 100  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 120  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 150  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 180  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 220  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 270  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 330  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 390  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 470  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 560  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 680  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 820  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 1000 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 1200 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 1500 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 1800        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 2200        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 2700        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 3300        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 3900        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 4700        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 5600        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 6800        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 8200        |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| cap<br>(μF) | .010 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .012 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .015 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .018 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .022 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .027 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .033 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .039 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .047 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .056 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .068 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .082 |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .10  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .12  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .15  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .18  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .22  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .27  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .33  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .39  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .47  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .56  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .68  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | .82  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
|             | 1.0  |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 1.5         |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 2.2         |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |
| 3.3         |      |      |    |    |    |    |     |     |     |     |     |    |    |      |    |     |     |     |     |     |    |    |    |  |  |

X7R  
X5R

- 要了解最大容量及更详细技术参数，请联络火炬电子。
- 外形尺寸的优选建议：相同的容量、耐压、精度，选用较小尺寸的规格，供货期短、价格较优。  
例：0805与1206规格同样能满足要求的，请选用0805规格。
- 厚度特殊要求，请咨询火炬电子4008-878799。