

# DCM 型中压圆片瓷介电容器

## Type DCM middle voltage disc ceramic capacitors

### 特性 Feature

- 容量范围 Wide capacitance range from 100pF to 10000pF
- 工作温度 Operating Temperature:  $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
- 存储温度 Storage Temperature:  $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$

### 应用 Applications

DCM 型中压圆片瓷介电容器的 I 类（温度特性 CO 和 SL）适用于调谐回路和需要补偿温度效应的电路中，II 类（温度特性 Y5P、Y5U、Z5U、Y5V）适用于旁路、滤波、耦合、隔直流等电路中。

In the class I (CO and SL Temperature characteristic), DCM capacitors allow the Temperature compensating disc capacitors to be used in critical circuit application such as tuned circuits, CLASS II(Y5P,Y5U,Z5U,Y5V Temperature characteristic) capacitors are fit for the circuit such as bypass, filter, coupling etc, Where a large amount of Capacitance is required and the circuit is less sensitive to Capacitance change with Temperature variations.

### 产品型号 Part Number

DCM 101 K 20 Y5P L 6 B L 5 □□

型号 Type: \_\_\_\_\_

DCM: 中压圆片瓷介电容器

电容量 (Capacitance): \_\_\_\_\_

470:47pF

471:470pF

472:2200pF

103:10000pF

电容量允许偏差

Capacitance Tolerance:

M=20%

Z=+80%-20%

K=±10%

J=±5%

尺寸代码 Size: \_\_\_\_\_

见规格详情

See the specification

温度特性

temperature characteristic:

Y5P, Y5U, Y5V

额定电压 Rated voltage: \_\_\_\_\_

L=500VDC

内部管理代码

Interior managing

位引线间距 Lead spacing:

5=5.0mm 7=7.5mm 0=10mm

引线式样 Lead style:

L、J、

见引线形状 see the lead style

Figure1-2 and figure 1-3

位引线长度/包装方法/

Lead length/package:

B=20min. mm, 6=6.0±0.5mm

0=10.0±0.5mm, 8=8.0±0.5mm,

W=3.4±0.3mm, A=7.0±0.5mm, 3=3.0±0.3mm

F=12.7mm 编带/扇折, V=15.0mm 编带/扇折

引线直径 Lead diameter:

CP 线:

6=0.55±0.05mm 5=0.48±0.05mm

# 脚型 Lead style

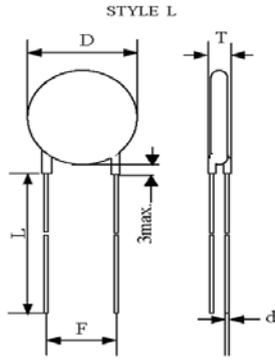


Figure 1-2

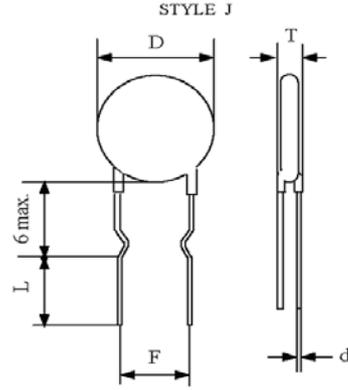


Figure 1-3

## 规格 Specification

| SHM 产品代码<br>SHM Part No. | 额定电压<br>Rated voltage<br>(KV) | 标称容量<br>Nominal capacitance<br>(pF) | 电容量允许偏差范围<br>Tolerance (%) | 温度特性<br>Temperature Characteristic | 产品尺寸(mm)        |                 |               |                   |           |
|--------------------------|-------------------------------|-------------------------------------|----------------------------|------------------------------------|-----------------|-----------------|---------------|-------------------|-----------|
|                          |                               |                                     |                            |                                    | 直径<br>Dmax (mm) | 厚度<br>Tmax (mm) | 引线间距<br>F(mm) | 引线直径<br>d (mm)    | 散件/<br>编带 |
| DCM101K20Y5PL6FJ5A0      | 500VDC                        | 100                                 | ±10%                       | Y5P                                | 5.0             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM102K22X7RL6FJ5B8      | 500VDC                        | 1000                                | ±10%                       | X7R                                | 5.5             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM102K22Y5PL5WL5A0      | 500VDC                        | 1000                                | ±10%                       | Y5P                                | 5.5             | 4.0             | 5.0           | 0.48±0.05         | 散件        |
| DCM102K22Y5PL6FJ5A0      | 500VDC                        | 1000                                | ±10%                       | Y5P                                | 5.5             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM102K22Y5PLEFJ5A0      | 500VDC                        | 1000                                | ±10%                       | Y5P                                | 5.5             | 4.0             | 5.0           | 0.58±0.05<br>镀锡铜线 | 编带        |
| DCM102M20Y5UL6FJ5A0      | 500VDC                        | 1000                                | ±20%                       | Y5U                                | 5.0             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM102M20Y5UL6WJ5A0      | 500VDC                        | 1000                                | ±20%                       | Y5U                                | 5.0             | 4.0             | 5.0           | 0.55±0.05         | 散件        |
| DCM102M20Y5VL5WL5A0      | 500VDC                        | 1000                                | ±20%                       | Y5V                                | 5.0             | 4.0             | 5.0           | 0.48±0.05         | 散件        |
| DCM102M22Y5UL6WL5A0      | 500VDC                        | 1000                                | ±20%                       | Y5U                                | 5.5             | 4.0             | 5.0           | 0.55±0.05         | 散件        |
| DCM103M30Y5VL6FJ5A0      | 500VDC                        | 10000                               | ±20%                       | Y5V                                | 7.5             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM103M30Y5VL6WL5A0      | 500VDC                        | 10000                               | ±20%                       | Y5V                                | 7.5             | 4.0             | 5.0           | 0.55±0.05         | 散件        |
| DCM103Z30Y5VL6BL5A0      | 500VDC                        | 10000                               | +80% to<br>-20%            | Y5V                                | 7.5             | 4.0             | 5.0           | 0.55±0.05         | 散件        |
| DCM103Z30Y5VL6FJ5A0      | 500VDC                        | 10000                               | +80% to<br>-20%            | Y5V                                | 7.5             | 4.0             | 5.0           | 0.55±0.05         | 编带        |
| DCM152K26Y5PL6FJ5A0      | 500VDC                        | 1500                                | ±10%                       | Y5P                                | 6.5             | 4.0             | 5.0           | 0.55±0.05         | 编带        |

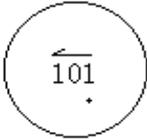
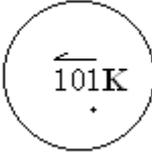
|                     |        |       |                 |     |      |     |     |           |    |
|---------------------|--------|-------|-----------------|-----|------|-----|-----|-----------|----|
| DCM152K26Y5PL6FL5A0 | 500VDC | 1500  | ±10%            | Y5P | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM221K20Y5PL6AJ5A0 | 500VDC | 220   | ±10%            | Y5P | 5.0  | 4.0 | 5.0 | 0.55±0.05 | 散件 |
| DCM222K26X7RL5BL5A0 | 500VDC | 2200  | ±10%            | X7R | 6.5  | 4.0 | 5.0 | 0.48±0.05 | 散件 |
| DCM222K26X7RL6FJ5B8 | 500VDC | 2200  | ±10%            | X7R | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM222K26X7RL6FL5A0 | 500VDC | 2200  | ±10%            | X7R | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM222K26Y5PL6FJ5A0 | 500VDC | 2200  | ±10%            | Y5P | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM222K26Y5PL6FL5A0 | 500VDC | 2200  | ±10%            | Y5P | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM222M20Y5UL6FJ5A0 | 500VDC | 2200  | ±20%            | Y5U | 5.0  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM223M39Y5VL6FJ5A0 | 500VDC | 22000 | ±20%            | Y5V | 10.0 | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM223M39Y5VL6WJ5A0 | 500VDC | 22000 | ±20%            | Y5V | 10.0 | 4.0 | 5.0 | 0.55±0.05 | 散件 |
| DCM471K20Y5PL6FJ5A0 | 500VDC | 470   | ±10%            | Y5P | 5.0  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472K39X7RL6FL5A0 | 500VDC | 4700  | ±10%            | X7R | 10.0 | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472K39Y5PL6FJ5A0 | 500VDC | 4700  | ±10%            | Y5P | 10.0 | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472K39Y5PL6FL5A0 | 500VDC | 4700  | ±10%            | Y5P | 10.0 | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472M26Y5UL6FJ5A0 | 500VDC | 4700  | ±20%            | Y5U | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472M26Y5UL6WJ5A0 | 500VDC | 4700  | ±20%            | Y5U | 6.5  | 4.0 | 5.0 | 0.55±0.05 | 散件 |
| DCM472M30Y5UL6FJ5A0 | 500VDC | 4700  | ±20%            | Y5U | 7.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |
| DCM472Z22Y5VL6FJ5A0 | 500VDC | 4700  | +80% to<br>-20% | Y5V | 5.5  | 4.0 | 5.0 | 0.55±0.05 | 编带 |

## 电性能指标 Electrical Performance

| 序号<br>No. | 项目名称 Item                             | 技术要求 Specification      |   |
|-----------|---------------------------------------|-------------------------|---|
| 1         | 容量和误差 C                               | @25°C, 1 kHz and 1 Vrms | 参照规格表<br>See the specification                |
| 2         | 损耗系数 DF                               | @25°C, 1 kHz and 1 Vrms | 2.5% max. (Y5P, Y5U&X7R)                      |
| 3         | 绝缘电阻 IR                               | @500 VDC,60S            | 10000MΩmin                                    |
| 4         | 耐电压<br>Rate<br>Voltage                | 500VDC                  | 300% 额定电压<br><br>无击穿或飞弧。<br>No visible damage |
|           |                                       |                         |   |
|           |                                       |                         |   |
| 5         | 温度特性<br>temperature<br>characteristic | SL                      | + 140~-1100 (10 <sup>-6</sup> /°C)            |
|           |                                       | X7R                     | ±15%  |
|           |                                       | Y5P                     | ±10%  |
|           |                                       | Y5U                     | +22% to -56%                                  |
|           |                                       | Y5V                     | +22% to -82%                                  |

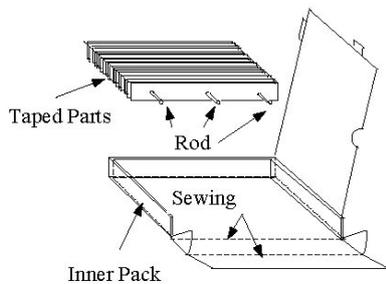
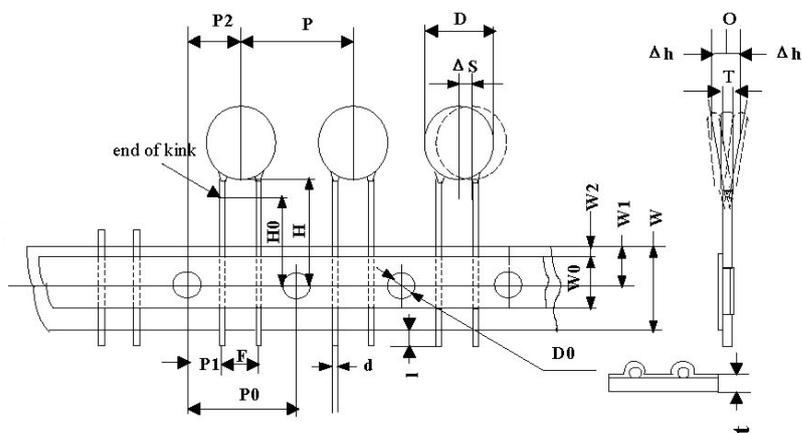
## 标志 Marking

例如 e.g

|             | 22#号产品以下<br>≤ 22#   | 26#号产品以下<br>=26#  | 30#产品以上<br>≥30#   |
|-------------|---|---|---|
| 正面<br>Front |  |  |  |
| 反面<br>Back  | 空白<br>Blank   | 空白<br>Blank   | 空白<br>Blank   |

# 编带样式 Taping style

## TAPING STYLE F



| Symbol | Dimension(mm)                   |
|--------|---------------------------------|
| P0     | 12.7±0.2                        |
| P      | 12.7±1.0                        |
| F      | 5.0±0.5                         |
| P1     | 3.85±0.4                        |
| P2     | 6.35±0.4                        |
| H0     | 16.0±0.5* <sup>1</sup>          |
| H      | 20.0±0.5* <sup>2</sup>          |
| W      | 18.0±0.5                        |
| W0     | 8.0min.                         |
| W1     | 9.0±0.3                         |
| W2     | 3.0max.                         |
| t      | 0.7±0.2                         |
| D      | To comply with individual sheet |
| D0     | 4±0.2                           |
| d      | To comply with individual sheet |
| l      | 2.0max.                         |
| T      | To comply with individual sheet |
| ΔS     | 1.0 max.                        |
| Δh     | 1.0 max.                        |

1. \*1 打弯脚型以H0为准。

For kink lead only.

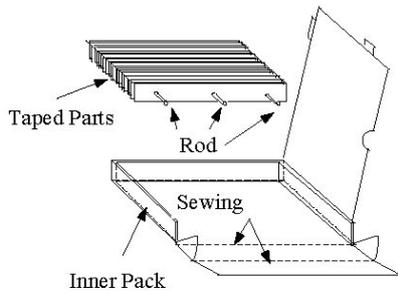
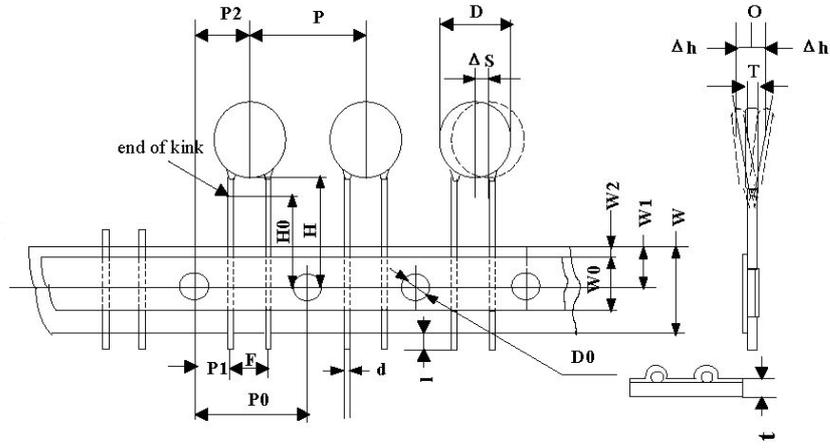
2. \*2 直脚产品以H为准。

For straight lead only.

Figure 2

备注 1 DCM102K22X7RL6FJ5B8 的编带

### TAPING STYLE F



| Symbol | Dimension(mm)                   |
|--------|---------------------------------|
| P0     | 12.7±0.2                        |
| P      | 12.7±1.0                        |
| F      | 5.0±0.5                         |
| P1     | 3.85±0.4                        |
| P2     | 6.35±0.4                        |
| H0     | 17+1.0/-0.5                     |
| H      | 20.0±0.5 <sup>*2</sup>          |
| W      | 18.0±0.5                        |
| W0     | 8.0min.                         |
| W1     | 9.0±0.3                         |
| W2     | 3.0max.                         |
| t      | 0.7±0.2                         |
| D      | To comply with individual sheet |
| D0     | 4±0.2                           |
| d      | To comply with individual sheet |
| l      | 2.0max.                         |
| T      | To comply with individual sheet |
| ΔS     | 1.0 max.                        |
| Δh     | 1.0 max.                        |

- 1. \*1 打弯脚型以H0为准。  
For kink lead only.
- 2. \*2 直脚产品以H为准。  
For straight lead only.

Figure 2