

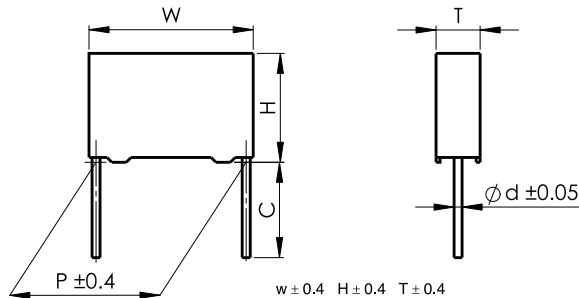


**C82**  
MMKP82 series

## 塑料外壳双面金属化聚丙烯膜电容器

## Double sided metallized polypropylene film capacitor (Box-type)

### ■ 外形图 Outline Drawing



### ■ 特点

- 双面金属化聚丙烯膜
- 损耗小，内部温升小
- 负电容量温度系数
- 优异的阻燃性能

### ■ 主要用途

- 广泛应用于高压高频脉冲电路中
- 电子镇流器和节能灯中
- 吸收和SCR整流电路

### ■ 技术要求 Specifications

### ■ Features

- Doublesided metallized polypropylene film
- Low loss and small inherent temperature rise
- Negative temperature coefficient of capacitance
- Excellent active and passive flame resistant abilities

### ■ Typical Applications

- Widely used in high voltage, high frequency and pulse circuit
- Electronic ballasts and compact lamps
- SNUBBER and SCR commutating circuits

|  |   |              |        |        |        |        |
|--|---|--------------|--------|--------|--------|--------|
| 引用标准 Reference Standard  | GB/T 10190(IEC 60384-16)  |              |        |        |        |        |
| 气候类别 Climatic Category   | 40/105/56   |              |        |        |        |        |
| 额定温度 Rated Temperature   | 85°C for $U_R$ (dc); 75°C for $U_R$ (ac)  |              |        |        |        |        |
| 工作温度 Operating Temperature Range   | -40°C ~ 105°C<br>(+85°C to +105°C: decreasing factor 1.25% per °C for $U_R$ (dc))<br>(+75°C to +105°C: decreasing factor 1.35% per °C for $U_R$ (ac)) |              |        |        |        |        |
| 额定电压 Rated Voltage   | 250V, 400V, 630V, 1 000V, 1 600V, 2 000V  |              |        |        |        |        |
| 电容量范围 Capacitance Range  | 0.00022μF ~ 3.9μF   |              |        |        |        |        |
| 电容量偏差 Capacitance Tolerance  | ± 2%(G), ± 3%(H), ± 5%(J), ± 10%(K), ± 20%(M)   |              |        |        |        |        |
| 耐电压 Voltage Proof  | 1.6 $U_R$ ( 5s )  |              |        |        |        |        |
| 损耗角正切 Dissipation Factor   | ≤ 10 × 10 <sup>-4</sup> (1kHz, 20°C)  |              |        |        |        |        |
| 绝缘电阻 Insulation Resistance   | R ≥ 100 000MΩ, $C_N$ ≤ 0.33μF<br>R $C_N$ ≥ 30 000, $C_N$ > 0.33μF (20°C, 100V, 1min)  |              |        |        |        |        |
| 最大脉冲爬升速率 Maximum Pulse Rise Time(dV/dt): 若实际工作电压 U 比额定电压 $U_R$ 低, 电容器可工作在更高的 dV/dt 场合, 这样 dv/dt 允许值应为右表值乘以 $U_R/U$ 。<br>If the working voltage(U) is lower than the rated voltage( $U_R$ ), the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the right value with $U_R/U$ . | $U_R$ (V)   | dV/dt (V/μs) |        |        |        |        |
|  |   | P=7.5        | P=10.0 | P=15.0 | P=22.5 | P=27.5 |
|  | 250   | 1 200        | 1 000  | 550    | 250    | 200    |
|  | 400   | 1 800        | 1 500  | 900    | 500    | 300    |
|  | 630   | 3 200        | 3 200  | 2 500  | 1 500  | 900    |
|  | 1 000   | 6 000        | 6 000  | 3 300  | 2 100  | 1 000  |
| 1 600  | ---   | ---          | 6 000  | 3 000  | 2 000  |        |
| 2 000  | ---   | ---          | 10 000 | 5 000  | 2 200  |        |

产品编码说明 Part number system

■ 18位产品代码如下：

The 18 digits part number is formed as follow:

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| C | 8 | 2 |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |

|         |  |                |  |
|---------|--|----------------|--|
| 第1~3位   | 型号代码<br>C82= MMKP82  | Digit 1 to 3   | Series code<br>C82= MMKP82   |
| 第4~5位   | 直流额定电压<br>2E=250V 2G=400V 2J=630V<br>3A=1 000V 3C=1 600V 3D=2 000V | Digit 4 to 5   | D.C. rated voltage<br>2E=250V 2G=400V 2J=630V<br>3A=1 000V 3C=1 600V 3D=2 000V |
| 第6~8位   | 标称容量<br>举例：103=10 × 10 <sup>3</sup> pF=0.01μF                      | Digit 6 to 8   | Rated capacitance value<br>For example: 103=10 × 10 <sup>3</sup> pF=0.01μF     |
| 第9位     | 容量偏差<br>G= ± 2%,H = ± 3%,J= ± 5%<br>K= ± 10%, M= ± 20%             | Digit 9        | Capacitance tolerance<br>G= ± 2%,H = ± 3%,J= ± 5%<br>K= ± 10%, M= ± 20%        |
| 第10位    | 引线脚距P<br>3=7.5mm 4=10.0mm 6=15.0mm<br>9=22.5mm B=27.5mm            | Digit 10       | Pitch<br>3=7.5mm 4=10.0mm 6=15.0mm<br>9=22.5mm B=27.5mm                        |
| 第11位    | 内部特征码  | Digit 11       | Internal use   |
| 第12~15位 | 引线加工和包装代码  | Digit 12 to 15 | Lead form and packaging code   |
| 第16~18位 | 内部特征码  | Digit 16 to 18 | Internal use   |

■ Table 1 引线加工和包装代码 lead form and packaging code

| 第 12 位 Digit 12 |   | 第 13 位 Digit 13 |  | 第 14 位 Digit 14 |                  | 第 15 位 Digit 15 |  |
|-----------------|---|-----------------|--|-----------------|------------------|-----------------|--|
| 代码 Code         | 说明 explanation                                    | 代码 Code         | 说明 explanation   | 代码 Code         | 说明 explanation   | 代码 Code         | 说明 explanation   |
| A               | 弹带包装<br>ammo-pack                                 | 3<br>4<br>6     | F=7.5mm<br>F=10.0mm<br>F=15.0mm  | 0               | 表示直脚<br>straight | 1<br><br>5      | 产品在连续的两个载带孔之间<br>each cap. among two consecutive holes<br>P3=12.7mm,H=18.5mm (For pitch=7.5mm)<br><br>P3=25.4mm;H=18.5mm (For pitch=10/15mm)<br>(Detail parameter refer to pag 17) |
| C               | 直脚<br>straight lead<br>“C” in the<br>figure above | 代码 Code         | 说明 explanation   |                 |                  | 0               | 引线长度偏差 ± 0.5mm 或标准长度<br>Length tolerance ± 0.5mm<br>Or standard length   |
|                 |   | 00<br>45        | 标准的引线长度 (18mm~26mm)<br>standard lead length<br>引线长度 4.5mm<br>lead length 4.5mm |                 |                  |                 |  |



■ 外形尺寸 Dimensions ( mm )

| 250Vdc(180Vac)         |      |      |      |      |     |                   |
|------------------------|------|------|------|------|-----|-------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T    | P    | d   | Part number       |
| 0.0068                 | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E682-30****++ |
| 0.0082                 | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E822-30****++ |
| 0.010                  | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E103-30****++ |
| 0.012                  | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E123-30****++ |
| 0.015                  | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E153-30****++ |
| 0.018                  | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E183-30****++ |
| 0.022                  | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822E223-30****++ |
| 0.027                  | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C822E273-30****++ |
| 0.033                  | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C822E333-30****++ |
| 0.039                  | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C822E393-30****++ |
| 0.047                  | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C822E473-30****++ |
| 0.027                  | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822E273-40****++ |
| 0.033                  | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822E333-40****++ |
| 0.039                  | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822E393-40****++ |
| 0.047                  | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C822E473-40****++ |
| 0.056                  | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C822E563-40****++ |
| 0.068                  | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C822E683-40****++ |
| 0.082                  | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C822E823-40****++ |
| 0.068                  | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822E683-60****++ |
| 0.082                  | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822E823-60****++ |
| 0.10                   | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822E104-60****++ |
| 0.12                   | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822E124-60****++ |
| 0.15                   | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822E154-60****++ |
| 0.18                   | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C822E184-60****++ |
| 0.22                   | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C822E224-60****++ |
| 0.27                   | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C822E274-60****++ |
| 0.33                   | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C822E334-60****++ |
| 0.39                   | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C822E394-60****++ |
| 0.22                   | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822E224-90****++ |
| 0.27                   | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822E274-90****++ |
| 0.33                   | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822E334-90****++ |
| 0.39                   | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C822E394-90****++ |
| 0.47                   | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C822E474-90****++ |
| 0.56                   | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C822E564-90****++ |
| 0.68                   | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C822E684-90****++ |
| 0.82                   | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C822E824-90****++ |
| 1.0                    | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822E105-90****++ |
| 0.82                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822E824-B0****++ |
| 1.0                    | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822E105-B0****++ |
| 1.2                    | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822E125-B0****++ |
| 1.5                    | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C822E155-B0****++ |
| 1.8                    | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C822E185-B0****++ |
| 2.2                    | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C822E225-B0****++ |
| 2.7                    | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822E275-B0****++ |
| 3.3                    | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822E335-B0****++ |
| 3.9                    | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822E395-B0****++ |

| 400Vdc(250Vac) <sup>@</sup> |      |      |      |      |     |                   |
|-----------------------------|------|------|------|------|-----|-------------------|
| C <sub>N</sub><br>(μF)      | W    | H    | T    | P    | d   | Part number       |
| 0.0027                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G272-30****++ |
| 0.0033                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G332-30****++ |
| 0.0039                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G392-30****++ |
| 0.0047                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G472-30****++ |
| 0.0056                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G562-30****++ |
| 0.0068                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G682-30****++ |
| 0.0082                      | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G822-30****++ |
| 0.010                       | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G103-30****++ |
| 0.012                       | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C822G123-30****++ |
| 0.015                       | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C822G153-30****++ |
| 0.018                       | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C822G183-30****++ |
| 0.022                       | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C822G223-30****++ |
| 0.027                       | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C822G273-30****++ |
| 0.010                       | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822G103-40****++ |
| 0.012                       | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822G123-40****++ |
| 0.015                       | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822G153-40****++ |
| 0.018                       | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822G183-40****++ |
| 0.022                       | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C822G223-40****++ |
| 0.027                       | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C822G273-40****++ |
| 0.033                       | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C822G333-40****++ |
| 0.039                       | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C822G393-40****++ |
| 0.047                       | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C822G473-40****++ |
| 0.033                       | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822G333-60****++ |
| 0.039                       | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822G393-60****++ |
| 0.047                       | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822G473-60****++ |
| 0.056                       | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C822G563-60****++ |
| 0.068                       | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822G683-60****++ |
| 0.082                       | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822G823-60****++ |
| 0.10                        | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C822G104-60****++ |
| 0.12                        | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C822G124-60****++ |
| 0.15                        | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C822G154-60****++ |
| 0.18                        | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C822G184-60****++ |
| 0.22                        | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C822G224-60****++ |
| 0.27                        | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | C822G274-60****++ |
| 0.12                        | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822G124-90****++ |
| 0.15                        | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822G154-90****++ |
| 0.18                        | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822G184-90****++ |
| 0.22                        | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C822G224-90****++ |
| 0.27                        | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C822G274-90****++ |
| 0.33                        | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C822G334-90****++ |
| 0.39                        | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C822G394-90****++ |
| 0.47                        | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C822G474-90****++ |
| 0.56                        | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822G564-90****++ |
| 0.68                        | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822G684-90****++ |
| 0.39                        | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822G394-B0****++ |
| 0.47                        | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822G474-B0****++ |
| 0.56                        | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822G564-B0****++ |
| 0.68                        | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822G684-B0****++ |
| 0.82                        | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C822G824-B0****++ |
| 1.0                         | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C822G105-B0****++ |
| 1.2                         | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C822G125-B0****++ |
| 1.5                         | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822G155-B0****++ |
| 1.8                         | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822G185-B0****++ |

备注: 1. “-”表示容量偏差。“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%,H=±3%,G=±2%  
 2. “\*\*\*\*”表示引线加工和包装代码(见表1)。“\*\*\*\*”=lead form and packing code (refer to table 1)  
 3. “@”不用作跨线,请参见抗干扰电容器(Pag.109)  
 “@” Not suitable for across-the-line applications. Pls refer to Interference Suppression Capacitors(Pag.109)

■ 外形尺寸 Dimensions ( mm )

| 630Vdc(400Vac)         |      |      |     |      |     |                    |
|------------------------|------|------|-----|------|-----|--------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T   | P    | d   | Part number        |
| 0.00068                | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J681-30****+++ |
| 0.00082                | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J821-30****+++ |
| 0.0010                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J102-30****+++ |
| 0.0012                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J122-30****+++ |
| 0.0015                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J152-30****+++ |
| 0.0018                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J182-30****+++ |
| 0.0022                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J222-30****+++ |
| 0.0027                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J272-30****+++ |
| 0.0033                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J332-30****+++ |
| 0.0039                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J392-30****+++ |
| 0.0047                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J472-30****+++ |
| 0.0056                 | 10.5 | 9.0  | 4.0 | 7.5  | 0.6 | C822J562-30****+++ |
| 0.0068                 | 10.5 | 11.0 | 5.0 | 7.5  | 0.6 | C822J682-30****+++ |
| 0.0082                 | 10.5 | 11.0 | 5.0 | 7.5  | 0.6 | C822J822-30****+++ |
| 0.010                  | 10.5 | 12.0 | 6.0 | 7.5  | 0.6 | C822J103-30****+++ |
| 0.012                  | 10.5 | 12.0 | 6.0 | 7.5  | 0.6 | C822J123-30****+++ |
| 0.0039                 | 13.0 | 9.0  | 4.0 | 10.0 | 0.6 | C822J392-40****+++ |
| 0.0047                 | 13.0 | 9.0  | 4.0 | 10.0 | 0.6 | C822J472-40****+++ |
| 0.0056                 | 13.0 | 9.0  | 4.0 | 10.0 | 0.6 | C822J562-40****+++ |
| 0.0068                 | 13.0 | 9.0  | 4.0 | 10.0 | 0.6 | C822J682-40****+++ |
| 0.0082                 | 13.0 | 9.0  | 4.0 | 10.0 | 0.6 | C822J822-40****+++ |
| 0.010                  | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 | C822J103-40****+++ |
| 0.012                  | 13.0 | 11.0 | 5.0 | 10.0 | 0.6 | C822J123-40****+++ |
| 0.015                  | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 | C822J153-40****+++ |
| 0.018                  | 13.0 | 12.0 | 6.0 | 10.0 | 0.6 | C822J183-40****+++ |
| 0.010                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J103-60****+++ |
| 0.012                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J123-60****+++ |
| 0.015                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J153-60****+++ |
| 0.018                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J183-60****+++ |
| 0.022                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J223-60****+++ |
| 0.027                  | 17.5 | 11.0 | 5.0 | 15.0 | 0.8 | C822J273-60****+++ |
| 0.033                  | 17.5 | 12.0 | 6.0 | 15.0 | 0.8 | C822J333-60****+++ |

| 630Vdc(400Vac)         |      |      |      |      |     |                    |
|------------------------|------|------|------|------|-----|--------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T    | P    | d   | Part number        |
| 0.039                  | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822J393-60****+++ |
| 0.047                  | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C822J473-60****+++ |
| 0.056                  | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C822J563-60****+++ |
| 0.068                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C822J683-60****+++ |
| 0.082                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C822J823-60****+++ |
| 0.10                   | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C822J104-60****+++ |
| 0.12                   | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | C822J124-60****+++ |
| 0.047                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822J473-90****+++ |
| 0.056                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822J563-90****+++ |
| 0.068                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822J683-90****+++ |
| 0.082                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822J823-90****+++ |
| 0.10                   | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C822J104-90****+++ |
| 0.12                   | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C822J124-90****+++ |
| 0.15                   | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C822J154-90****+++ |
| 0.18                   | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C822J184-90****+++ |
| 0.22                   | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C822J224-90****+++ |
| 0.27                   | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822J274-90****+++ |
| 0.33                   | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822J334-90****+++ |
| 0.39                   | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C822J394-90****+++ |
| 0.15                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822J154-B0****+++ |
| 0.18                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822J184-B0****+++ |
| 0.22                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822J224-B0****+++ |
| 0.27                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C822J274-B0****+++ |
| 0.33                   | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822J334-B0****+++ |
| 0.39                   | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C822J394-B0****+++ |
| 0.47                   | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C822J474-B0****+++ |
| 0.56                   | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C822J564-B0****+++ |
| 0.68                   | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C822J684-B0****+++ |
| 0.82                   | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 | C822J824-B0****+++ |
| 1.0                    | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822J105-B0****+++ |
| 1.2                    | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C822J125-B0****+++ |

备注: 1. “-”表示容量偏差。 “-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%,H=±3%,G=±2%  
2. “\*\*\*\*”表示引线加工和包装代码(见table 1)。“\*\*\*\*”=lead form and packing code( refer to table 1)



C82  
MMKP82 series

■ 外形尺寸 Dimensions ( mm )

| 1 000Vdc(600Vac)       |      |      |      |      |     |                   |
|------------------------|------|------|------|------|-----|-------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T    | P    | d   | Part number       |
| 0.00047                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C823A471-30****++ |
| 0.00056                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C823A561-30****++ |
| 0.00068                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C823A681-30****++ |
| 0.00082                | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C823A821-30****++ |
| 0.0010                 | 10.5 | 9.0  | 4.0  | 7.5  | 0.6 | C823A102-30****++ |
| 0.0012                 | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C823A122-30****++ |
| 0.0015                 | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C823A152-30****++ |
| 0.0018                 | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C823A182-30****++ |
| 0.0022                 | 10.5 | 11.0 | 5.0  | 7.5  | 0.6 | C823A222-30****++ |
| 0.0027                 | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C823A272-30****++ |
| 0.0033                 | 10.5 | 12.0 | 6.0  | 7.5  | 0.6 | C823A332-30****++ |
| 0.0010                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A102-40****++ |
| 0.0012                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A122-40****++ |
| 0.0015                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A152-40****++ |
| 0.0018                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A182-40****++ |
| 0.0022                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A222-40****++ |
| 0.0027                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A272-40****++ |
| 0.0033                 | 13.0 | 9.0  | 4.0  | 10.0 | 0.6 | C823A332-40****++ |
| 0.0039                 | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C823A392-40****++ |
| 0.0047                 | 13.0 | 11.0 | 5.0  | 10.0 | 0.6 | C823A472-40****++ |
| 0.0056                 | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C823A562-40****++ |
| 0.0068                 | 13.0 | 12.0 | 6.0  | 10.0 | 0.6 | C823A682-40****++ |
| 0.0082                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823A822-60****++ |
| 0.010                  | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823A103-60****++ |
| 0.012                  | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823A123-60****++ |
| 0.015                  | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823A153-60****++ |
| 0.018                  | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823A183-60****++ |
| 0.022                  | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823A223-60****++ |
| 0.027                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C823A273-60****++ |
| 0.033                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C823A333-60****++ |
| 0.039                  | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C823A393-60****++ |
| 0.047                  | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | C823A473-60****++ |
| 0.027                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823A273-90****++ |
| 0.033                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823A333-90****++ |
| 0.039                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823A393-90****++ |
| 0.047                  | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C823A473-90****++ |
| 0.056                  | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C823A563-90****++ |
| 0.068                  | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C823A683-90****++ |
| 0.082                  | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823A823-90****++ |
| 0.10                   | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823A104-90****++ |
| 0.12                   | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823A124-90****++ |
| 0.15                   | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823A154-90****++ |
| 0.10                   | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823A104-B0****++ |
| 0.12                   | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823A124-B0****++ |
| 0.15                   | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823A154-B0****++ |
| 0.18                   | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C823A184-B0****++ |
| 0.22                   | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C823A224-B0****++ |
| 0.27                   | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C823A274-B0****++ |
| 0.33                   | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 | C823A334-B0****++ |
| 0.39                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823A394-B0****++ |
| 0.47                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823A474-B0****++ |

| 1 600Vdc(650Vac)       |      |      |      |      |     |                   |
|------------------------|------|------|------|------|-----|-------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T    | P    | d   | Part number       |
| 0.00068                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C681-60****++ |
| 0.00082                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C821-60****++ |
| 0.0010                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C102-60****++ |
| 0.0012                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C122-60****++ |
| 0.0015                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C152-60****++ |
| 0.0018                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C182-60****++ |
| 0.0022                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C222-60****++ |
| 0.0027                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C272-60****++ |
| 0.0033                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C332-60****++ |
| 0.0039                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C392-60****++ |
| 0.0047                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C472-60****++ |
| 0.0056                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C562-60****++ |
| 0.0068                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823C682-60****++ |
| 0.0082                 | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C823C822-60****++ |
| 0.010                  | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C823C103-60****++ |
| 0.012                  | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823C123-60****++ |
| 0.015                  | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823C153-60****++ |
| 0.018                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C823C183-60****++ |
| 0.022                  | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C823C223-60****++ |
| 0.027                  | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C823C273-60****++ |
| 0.033                  | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | C823C333-60****++ |
| 0.015                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823C153-90****++ |
| 0.018                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823C183-90****++ |
| 0.022                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823C223-90****++ |
| 0.027                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823C273-90****++ |
| 0.033                  | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C823C333-90****++ |
| 0.039                  | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C823C393-90****++ |
| 0.047                  | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823C473-90****++ |
| 0.056                  | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823C563-90****++ |
| 0.068                  | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823C683-90****++ |
| 0.082                  | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823C823-90****++ |
| 0.039                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823C393-B0****++ |
| 0.047                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823C473-B0****++ |
| 0.056                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823C563-B0****++ |
| 0.068                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823C683-B0****++ |
| 0.082                  | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823C823-B0****++ |
| 0.10                   | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823C104-B0****++ |
| 0.12                   | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C823C124-B0****++ |
| 0.15                   | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C823C154-B0****++ |
| 0.18                   | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C823C184-B0****++ |
| 0.22                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823C224-B0****++ |
| 0.27                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823C274-B0****++ |
| 0.33                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823C334-B0****++ |

| 2 000Vdc(700Vac)       |      |      |      |      |     |                   |
|------------------------|------|------|------|------|-----|-------------------|
| C <sub>N</sub><br>(μF) | W    | H    | T    | P    | d   | Part number       |
| 0.00022                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D221-60****++ |
| 0.00027                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D271-60****++ |
| 0.00033                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D331-60****++ |
| 0.00039                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D391-60****++ |
| 0.00047                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D471-60****++ |
| 0.00056                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D561-60****++ |
| 0.00068                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D681-60****++ |
| 0.00082                | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D821-60****++ |
| 0.0010                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D102-60****++ |
| 0.0012                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D122-60****++ |
| 0.0015                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D152-60****++ |
| 0.0018                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D182-60****++ |
| 0.0022                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D222-60****++ |
| 0.0027                 | 17.5 | 11.0 | 5.0  | 15.0 | 0.8 | C823D272-60****++ |
| 0.0033                 | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C823D332-60****++ |
| 0.0039                 | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C823D392-60****++ |
| 0.0047                 | 17.5 | 12.0 | 6.0  | 15.0 | 0.8 | C823D472-60****++ |
| 0.0056                 | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823D562-60****++ |
| 0.0068                 | 17.5 | 13.5 | 7.5  | 15.0 | 0.8 | C823D682-60****++ |
| 0.0082                 | 17.5 | 14.5 | 8.5  | 15.0 | 0.8 | C823D822-60****++ |
| 0.010                  | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C823D103-60****++ |
| 0.012                  | 17.5 | 16.0 | 10.0 | 15.0 | 0.8 | C823D123-60****++ |
| 0.015                  | 17.5 | 19.0 | 11.0 | 15.0 | 0.8 | C823D153-60****++ |
| 0.0010                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D102-90****++ |
| 0.0012                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D122-90****++ |
| 0.0015                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D152-90****++ |
| 0.0018                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D182-90****++ |
| 0.0022                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D222-90****++ |
| 0.0027                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D272-90****++ |
| 0.0033                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D332-90****++ |
| 0.0039                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D392-90****++ |
| 0.0047                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D472-90****++ |
| 0.0056                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D562-90****++ |
| 0.0068                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D682-90****++ |
| 0.0082                 | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D822-90****++ |
| 0.010                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D103-90****++ |
| 0.012                  | 26.5 | 15.0 | 6.0  | 22.5 | 0.8 | C823D123-90****++ |
| 0.015                  | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C823D153-90****++ |
| 0.018                  | 26.5 | 16.0 | 7.0  | 22.5 | 0.8 | C823D183-90****++ |
| 0.022                  | 26.5 | 17.0 | 8.5  | 22.5 | 0.8 | C823D223-90****++ |
| 0.027                  | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823D273-90****++ |
| 0.033                  | 26.5 | 18.5 | 10.0 | 22.5 | 0.8 | C823D333-90****++ |
| 0.039                  | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823D393-90****++ |
| 0.047                  | 26.5 | 22.0 | 12.0 | 22.5 | 0.8 | C823D473-90****++ |
| 0.022                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823D223-B0****++ |
| 0.027                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823D273-B0****++ |
| 0.033                  | 32.0 | 18.0 | 9.0  | 27.5 | 0.8 | C823D333-B0****++ |
| 0.039                  | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823D393-B0****++ |
| 0.047                  | 32.0 | 20.0 | 11.0 | 27.5 | 0.8 | C823D473-B0****++ |
| 0.056                  | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C823D563-B0****++ |
| 0.068                  | 32.0 | 22.0 | 13.0 | 27.5 | 0.8 | C823D683-B0****++ |
| 0.082                  | 32.0 | 24.5 | 15.0 | 27.5 | 0.8 | C823D823-B0****++ |
| 0.10                   | 32.0 | 28.0 | 14.0 | 27.5 | 0.8 | C823D104-B0****++ |
| 0.12                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823D124-B0****++ |
| 0.15                   | 32.0 | 33.0 | 18.0 | 27.5 | 0.8 | C823D154-B0****++ |

备注: 1. “-”表示容量偏差。 “-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%,H=±3%,G=±2%  
2. “\*\*\*\*”表示引线加工和包装代码(见table 1)。“\*\*\*\*”=lead form and packing code( refer to table 1)