

金属化聚酯膜电容器(浸渍型)

Metallized polyester film capacitor(Dipped)

■ 外形图 Outline Drawing

	Forming Lead Shapes			
	I	II	III	IV
	P ≥ F		P < F	
	0mm ≤ P-F ≤ 3mm	3mm < P-F ≤ 8mm	3mm < F-P ≤ 5mm	0mm < F-P ≤ 3mm
F ± 1.0mm; A ≤ 5.0mm; B = 4.5 ± 0.5mm				

■ 特点

- 金属化聚酯膜, 无感卷绕结构
- 体积小, 自愈性好
- 阻燃性环氧粉末封装 (UL94/V-0)

■ Features

- metallized polyester film, non-inductive wound construction
- Small size and Excellent self-healing property
- Flame retardation epoxy resin coating (UL94/V-0)

■ 主要用途

- 用于开关电源、电子镇流器和变频器等中间电路直流滤波 (如: DC-Link、PFC 等)

■ Typical application

- As intermediate circuit capacitors for SMPS、Electronic Ballast、inverter (i.e. DC-link , DC-filter and P.F.C).

■ 技术要求 Specifications

引用标准 Reference Standard	GB/T 7332 (IEC 60384-2)
气候类别 Climatic Category	55/105/21
额定温度 Rated Temperature	85°C
工作温度范围 Operating Temperature Range	-55°C~105°C (+85°C to +105°C: decreasing factor 1.25% per °C for V <sub>R</sub> (dc))
额定电压 Rated Voltage	250V、400V/450V、520V、630V
电容量范围 Capacitance Range	0.010 μF ~ 10.0 μF
电容量偏差 Capacitance Tolerance	±5%(J)、±10%(K)、±20%(M)
耐电压 Voltage Proof	1.6U <sub>R</sub> (5s)
损耗角正切 Dissipation Factor	≤0.8% (20°C, 1kHz)
绝缘电阻 Insulation Resistance	≥15 000MΩ, C <sub>R</sub> ≤ 0.33 μF ≥5 000s, C <sub>R</sub> > 0.33 μF (20°C, 100V, 1min)

Not for the rated-voltage lower than 100Vdc, pls refer to CL21 or CL23B series.

额定电压低于 100V 的不再生产, 请用 CL21 或 CL23B。

## 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	2	2															

第 1~3 位	薄膜电容器系列代码 C22=CL21X	Digit 1 to 3	Series code of film capacitor C22=CL21X
第 4~5 位	直流额定电压 2E=250V 2G=400V 2S=450V 2T=520V 2J=630V	Digit 4 to 5	DC rated voltage 2E=250V 2G=400V 2S=450V 2T=520V 2J=630V
第 6~8 位	标称容量 举例: 103=10×10 <sup>3</sup> pF=0.01uF	Digit 6 to 8	Rated capacitance value for example: 103=10×10 <sup>3</sup> pF=0.01uF
第 9 位	容量偏差 J=±5% K=±10% M=±20%	Digit 9	Capacitance tolerance J=±5%,K=±10%,M=±20%
第 10 位	引线脚距 P 3=7.5mm 4=10.0mm 6=15.0mm 9=22.5mm	Digit 10	Pitch 3=7.5mm 4=10.0mm 6=15.0mm 9=22.5mm
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 ammo-pack	2	F=5.0mm	1	表示弯脚 kinked	A	产品在连续的两个载带孔之间 each cap. between two consecutive holes P3=12.7mm,H=20.0mm (For pitch=7.5mm)
		3	F=7.5mm			B	载带孔在产品的引线之间 each hole between two leads of a cap. P3=12.7mm,H=20.0mm (For pitch=10.0mm)
		4	F=10.0mm			E	P3=25.4mm;H=20.0mm (For pitch=15.0mm)
		6	F=15.0mm				(Detail information refer to pag 13)
F	引线成型 lead kinked	2	F=5.0mm	0	B=4.5mm (the length of B)	0	B 的长度偏差±0.5mm B Length tolerance ±0.5mm
		3	F=7.5mm				
		4	F=10.0mm				
		6	F=15.0mm				
Y	直脚 straight lead “Y” in the figure above	代码 Code	说明 explanation	0		0	引线长度偏差±0.5mm 或标准长度 Length tolerance ±0.5mm Or standard length
		45	引线长度 4.5mm lead length 4.5mm				
第 12-15 位代码为“C000”表示标准的引线长度 (20mm~30mm) Digit 12-15 code “C000” means standard lead length (20mm~30mm)							

■ 外形尺寸 Dimensions(mm)

250Vdc							400Vdc/450Vdc						
容量 ( $\mu$ F)	W max	H max	T max	P	d	产品代码 Part number	容量 ( $\mu$ F)	W max	H max	T max	P	d	产品代码 Part number
0.22	10.0	9.0	4.4	7.5	0.5	C222E224-30*****++	0.047	10.0	7.1	3.9	7.5	0.5	C222G473-30*****+++
0.33	10.0	9.8	5.2	7.5	0.5	C222E334-30*****++	0.068	10.0	8.0	4.2	7.5	0.5	C222G683-30*****+++
0.47	10.0	11.2	5.8	7.5	0.5	C222E474-30*****++	0.10	10.0	9.2	4.6	7.5	0.5	C222G104-30*****+++
0.68	10.0	13.4	6.4	7.5	0.5	C222E684-30*****++	0.15	10.0	10.1	5.5	7.5	0.5	C222G154-30*****+++
1.0	10.0	14.8	7.8	7.5	0.5	C222E105-30*****++	0.10	12.5	8.6	4.0	10.0	0.6	C222G104-40*****+++
0.33	12.5	8.5	4.7	10.0	0.6	C222E334-40*****++	0.15	12.5	9.2	4.6	10.0	0.6	C222G154-40*****+++
0.47	12.5	10.3	4.9	10.0	0.6	C222E474-40*****++	0.22	12.5	10.5	5.1	10.0	0.6	C222G224-40*****+++
0.68	12.5	11.2	5.8	10.0	0.6	C222E684-40*****++	0.33	12.5	12.6	5.7	10.0	0.6	C222G334-40*****+++
1.0	12.5	13.4	6.4	10.0	0.6	C222E105-40*****++	0.47	12.5	14.8	6.3	10.0	0.6	C222G474-40*****+++
1.5	12.5	15.9	7.3	10.0	0.6	C222E155-40*****++	0.68	12.5	16.2	7.6	10.0	0.6	C222G684-40*****+++
2.2	12.5	18.6	8.5	10.0	0.6	C222E225-40*****++	1.0	12.5	19.0	8.9	10.0	0.6	C222G105-40*****+++
0.47	17.8	8.8	4.2	15.0	0.8	C222E474-60*****++	0.22	17.8	9.8	4.4	15.0	0.8	C222G224-60*****+++
0.68	17.8	9.6	4.9	15.0	0.8	C222E684-60*****++	0.33	17.8	10.7	5.3	15.0	0.8	C222G334-60*****+++
1.0	17.8	11.0	5.6	15.0	0.8	C222E105-60*****++	0.47	17.8	12.6	5.7	15.0	0.8	C222G474-60*****+++
1.5	17.8	13.2	6.2	15.0	0.8	C222E155-60*****++	0.68	17.8	14.8	6.3	15.0	0.8	C222G684-60*****+++
2.2	17.8	15.6	7.0	15.0	0.8	C222E225-60*****++	1.0	17.8	16.3	7.7	15.0	0.8	C222G105-60*****+++
3.3	17.8	18.3	8.2	15.0	0.8	C222E335-60*****++	1.5	17.8	19.2	9.1	15.0	0.8	C222G155-60*****+++
4.7	17.8	20.2	10.1	15.0	0.8	C222E475-60*****++	2.2	17.8	21.4	11.2	15.0	0.8	C222G225-60*****+++
1.0	25.5	9.9	4.5	22.5	0.8	C222E105-90*****++	0.47	25.5	10.3	4.9	22.5	0.8	C222G474-90*****+++
1.5	25.5	11.9	4.9	22.5	0.8	C222E155-90*****++	0.68	25.5	12.3	5.3	22.5	0.8	C222G684-90*****+++
2.2	25.5	12.9	6.0	22.5	0.8	C222E225-90*****++	1.0	25.5	13.4	6.4	22.5	0.8	C222G105-90*****+++
3.3	25.5	15.4	6.8	22.5	0.8	C222E335-90*****++	1.5	25.5	15.9	7.3	22.5	0.8	C222G155-90*****+++
4.7	25.5	17.8	7.7	22.5	0.8	C222E475-90*****++	2.2	25.5	18.6	8.5	22.5	0.8	C222G225-90*****+++
6.8	25.5	19.7	9.5	22.5	0.8	C222E685-90*****++	3.3	25.5	20.8	10.7	22.5	0.8	C222G335-90*****+++
10.0	25.5	22.0	11.9	22.5	0.8	C222E106-90*****++							

- 备注: 1. “-”表示容量偏差。 “-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%  
 2. “\*\*\*\*\*”表示引线加工和包装代码 (见 table 1)。 “\*\*\*\*\*”=lead form and packaging code (refer to table 1)  
 3. “#”当额定电压为 450Vdc 时, 第 4~5 位是 2S。  
 “#”when the rated voltage is 450Vdc,the digit 4~5 is 2S.

■ 外形尺寸 Dimensions(mm)

520Vdc							630Vdc						
容量 ( $\mu$ F)	W max	H max	T max	P	d	产品代码 Part number	容量 ( $\mu$ F)	W max	H max	T max	P	d	产品代码 Part number
0.022	9.8	7.5	4.0	7.5	0.5	C222T223-30****+++	0.010	9.8	7.6	3.9	7.5	0.5	C222J103-30****+++
0.033	9.8	8.5	4.4	7.5	0.5	C222T333-30****+++	0.015	9.8	7.6	3.9	7.5	0.5	C222J153-30****+++
0.047	9.8	9.6	4.7	7.5	0.5	C222T473-30****+++	0.022	9.8	8.1	4.4	7.5	0.5	C222J223-30****+++
0.068	9.8	10.4	5.4	7.5	0.5	C222T683-30****+++	0.033	9.8	9.2	4.9	7.5	0.5	C222J333-30****+++
0.068	12.5	9.6	4.7	10.0	0.6	C222T683-40****+++	0.047	9.8	10.5	5.3	7.5	0.5	C222J473-30****+++
0.10	12.5	10.9	5.2	10.0	0.6	C222T104-40****+++	0.068	9.8	11.9	6.0	7.5	0.5	C222J683-30****+++
0.15	12.5	11.9	6.2	10.0	0.6	C222T154-40****+++	0.10	9.8	13.1	7.2	7.5	0.5	C222J104-30****+++
0.22	12.5	14.1	6.8	10.0	0.6	C222T224-40****+++	0.047	12.5	9.6	4.5	10.0	0.6	C222J473-40****+++
0.33	12.5	15.6	8.3	10.0	0.6	C222T334-40****+++	0.068	12.5	10.3	5.2	10.0	0.6	C222J683-40****+++
0.10	17.8	9.4	4.5	15.0	0.8	C222T104-60****+++	0.10	12.5	11.2	6.1	10.0	0.6	C222J104-40****+++
0.15	17.8	10.2	5.2	15.0	0.8	C222T154-60****+++	0.15	12.5	13.9	6.4	10.0	0.6	C222J154-40****+++
0.22	17.8	11.6	5.8	15.0	0.8	C222T224-60****+++	0.22	12.5	15.3	7.8	10.0	0.6	C222J224-40****+++
0.33	17.8	13.7	6.5	15.0	0.8	C222T334-60****+++	0.10	17.8	10.6	4.6	15.0	0.8	C222J104-60****+++
0.47	17.8	14.9	7.7	15.0	0.8	C222T474-60****+++	0.15	17.8	12.5	5.1	15.0	0.8	C222J154-60****+++
0.68	17.8	17.5	8.6	15.0	0.8	C222T684-60****+++	0.22	17.8	13.5	6.0	15.0	0.8	C222J224-60****+++
1.0	17.8	20.4	10.0	15.0	0.8	C222T105-60****+++	0.33	17.8	14.8	7.4	15.0	0.8	C222J334-60****+++
1.5	17.8	22.9	12.5	15.0	0.8	C222T155-60****+++	0.47	17.8	16.3	8.8	15.0	0.8	C222J474-60****+++
0.33	25.5	12.4	5.2	22.5	0.8	C222T334-90****+++	0.68	17.8	19.1	10.0	15.0	0.8	C222J684-60****+++
0.47	25.5	13.3	6.0	22.5	0.8	C222T474-90****+++	1.0	17.8	22.3	11.7	15.0	0.8	C222J105-60****+++
0.68	25.5	15.5	6.7	22.5	0.8	C222T684-90****+++	1.5	17.8	25.4	14.7	15.0	0.8	C222J155-60****+++
1.0	25.5	18.1	7.6	22.5	0.8	C222T105-90****+++	0.22	25.5	11.2	5.2	22.5	0.8	C222J224-90****+++
1.5	25.5	19.9	9.5	22.5	0.8	C222T155-90****+++	0.33	25.5	12.2	6.3	22.5	0.8	C222J334-90****+++
2.2	25.5	22.2	11.8	22.5	0.8	C222T225-90****+++	0.47	25.5	14.3	6.8	22.5	0.8	C222J474-90****+++
							0.68	25.5	15.7	8.2	22.5	0.8	C222J684-90****+++
							1.0	25.5	19.5	8.9	22.5	0.8	C222J105-90****+++
							1.5	25.5	21.8	11.1	22.5	0.8	C222J155-90****+++
							2.2	25.5	14.4	13.8	22.5	0.8	C222J225-90****+++

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