

MINIATURE METALLIZED PLOYESTER FILM CAPACITOR

小型化金属化聚酯膜电容器

概述 Overview

应用领域

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

参考标准

- GB 7332 (IEC 60384-2)

气候类别

- 40/85/21

结构

- 金属化聚酯膜，无感卷绕结构
- 阻燃性环氧粉末包封（UL94/V-0）

特点

- 容量范围宽，体积小
- 自愈性好，寿命长，可靠性高

Application

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

Reference standards

- GB 7332 (IEC 60384-2)

Climatic Category

- 40/85/21

Construction

- Metallized polyester film, non-inductive structure
- Solid flame retardant epoxy resin powder coating (UL94/V-0)

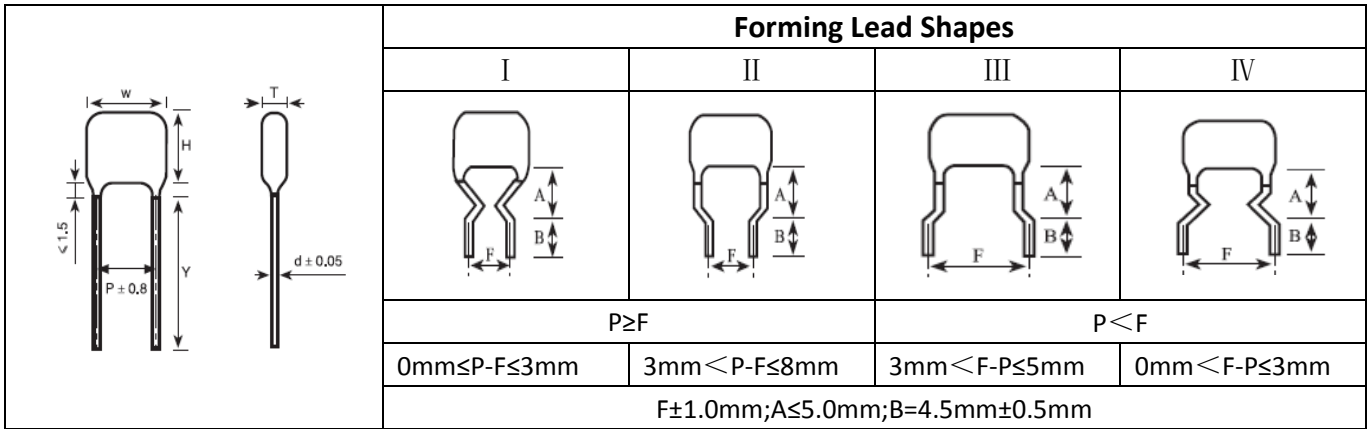
Features

- Wide capacitance range, small size
- Long life due to self-healing effect and high reliability

技术参数 Technical data

额定电压 Rated Voltage	50V, 63V, 100V, 250V, 400V, 630V
电容量范围 Capacitance Range	0.01~4.7 μ F
电容器允许偏差 Capacitance Tolerance	\pm 5% (J), \pm 10% (K)
耐电压 Voltage Proof	1.6V _R (5S)
介质损耗角正切 Dissipation factor tg δ	\leq 0.01 (20 $^{\circ}$ C, 1kHz)
绝缘电阻 Insulation resistance	\geq 13750M Ω , C _R \leq 0.33 μ F (20 $^{\circ}$ C, 1min) \geq 1250S, C _R \leq 0.33 μ F (20 $^{\circ}$ C, 1min)

尺寸图 SIZE



外型尺寸 Dimensions (mm)

50Vdc						
容量 (μF)	W (max)	H (max)	T (max)	P	d	产品代码 Part number
0.010	7.3	5.0	3.2	5.0	0.50	K121H103-5D++
0.015	7.3	5.0	3.2	5.0	0.50	K121H153-5D++
0.022	7.3	5.0	3.2	5.0	0.50	K121H223-5D++
0.033	7.3	5.0	3.2	5.0	0.50	K121H333-5D++
0.039	7.3	5.0	3.2	5.0	0.50	K121H393-5D++
0.047	7.3	5.0	3.2	5.0	0.50	K121H473-5D++
0.056	7.3	5.0	3.2	5.0	0.50	K121H563-5D++
0.068	7.3	5.0	3.2	5.0	0.50	K121H683-5D++
0.082	7.3	5.0	3.6	5.0	0.50	K121H823-5D++
0.10	7.3	5.0	4.0	5.0	0.50	K121H104-5D++
0.12	7.3	5.0	4.0	5.0	0.50	K121H124-5D++
0.15	7.3	5.5	4.4	5.0	0.50	K121H154-5D++
0.18	7.3	5.5	4.5	5.0	0.50	K121H184-5D++
0.22	7.3	5.5	4.8	5.0	0.50	K121H224-5D++
0.27	7.3	7.0	4.6	5.0	0.50	K121H274-5D++
0.33	7.3	7.0	5.2	5.0	0.50	K121H334-5D++
0.39	7.3	7.3	5.7	5.0	0.50	K121H384-5D++
0.47	7.3	7.3	6.0	5.0	0.50	K121H474-5D++
0.56	7.3	10.0	5.8	5.0	0.50	K121H564-5D++
0.68	7.3	10.0	6.5	5.0	0.50	K121H684-5D++
0.82	7.3	10.0	6.8	5.0	0.50	K121H824-5D++
1.0	7.3	11.0	8.0	5.0	0.50	K121H105-5D++
1.2	10.2	10.0	6.5	7.5	0.50	K121H125-5I++
1.5	10.2	10.0	7.2	7.5	0.50	K121H155-5I++
1.8	10.2	12.0	7.2	7.5	0.50	K121H185-5I++
2.2	10.2	12.0	7.9	7.5	0.50	K121H225-5I++

63Vdc						
容量 (μF)	W (max)	H (max)	T (max)	P	d	产品代码 Part number
0.010	7.5	6.8	3.2	5.0	0.50	K121J103-5D++
0.012	7.5	6.8	3.2	5.0	0.50	K121J123-5D++
0.015	7.5	6.8	3.2	5.0	0.50	K121J153-5D++
0.018	7.5	6.8	3.2	5.0	0.50	K121J183-5D++
0.022	7.5	6.8	3.2	5.0	0.50	K121J223-5D++
0.027	7.5	6.8	3.2	5.0	0.50	K121J273-5D++
0.033	7.5	6.8	3.2	5.0	0.50	K121J333-5D++
0.039	7.5	6.8	3.2	5.0	0.50	K121J393-5D++
0.047	7.5	6.8	3.2	5.0	0.50	K121J473-5D++
0.056	7.5	6.8	3.2	5.0	0.50	K121J563-5D++
0.068	7.5	6.8	3.2	5.0	0.50	K121J683-5D++
0.082	7.5	6.8	3.2	5.0	0.50	K121J823-5D++
0.10	7.5	7.0	3.2	5.0	0.50	K121J104-5D++
0.12	7.5	7.0	3.8	5.0	0.50	K121J124-5D++
0.15	7.5	7.0	4.1	5.0	0.50	K121J154-5D++
0.18	10.2	9.0	3.5	7.5	0.50	K121J184-5I++
0.22	10.2	9.0	3.5	7.5	0.50	K121J224-5I++
0.27	10.2	9.0	3.5	7.5	0.50	K121J274-5I++
0.33	10.2	9.0	3.8	7.5	0.50	K121J334-5I++
0.39	10.2	9.0	4.0	7.5	0.50	K121J394-5I++
0.47	10.2	9.0	4.5	7.5	0.50	K121J474-5I++
0.56	10.2	9.0	4.9	7.5	0.50	K121J564-5I++
0.68	10.2	10.0	5.5	7.5	0.50	K121J684-5I++
0.82	10.2	10.0	6.1	7.5	0.50	K121J824-5I++
1.0	10.2	10.0	6.9	7.5	0.50	K121J105-5I++

外型尺寸 Dimensions (mm)

400Vdc						
容量 (μ F)	W (max)	H (max)	T (max)	P	d	产品代码 Part number
0.010	7.9	7.1	4.2	5.0	0.5	K122G103-5D++
0.012	7.9	7.1	4.2	5.0	0.5	K122G123-5D++
0.015	7.9	7.1	4.2	5.0	0.5	K122G153-5D++
0.018	7.9	7.2	4.3	5.0	0.5	K122G183-5D++
0.022	7.9	7.2	4.4	5.0	0.5	K122G223-5D++
0.027	7.9	7.2	4.3	5.0	0.5	K122G273-5D++
0.033	7.9	7.2	4.3	5.0	0.5	K122G333-5D++
0.039	7.9	7.4	4.5	5.0	0.5	K122G393-5D++
0.047	11.0	10.5	7.0	7.5	0.6	K122G473-6I++
0.056	11.0	10.5	7.0	7.5	0.6	K122G563-6I++
0.068	11.0	10.5	7.0	7.5	0.6	K122G683-6I++
0.082	13.0	12.0	7.5	10.0	0.6	K122G823-6N++
0.10	13.0	12.0	7.5	10.0	0.6	K122G104-6N++
0.12	13.0	12.0	7.5	10.0	0.6	K122G124-6N++
0.15	13.0	12.0	7.5	10.0	0.6	K122G154-6N++
0.18	13.0	12.0	7.5	10.0	0.6	K122G184-6N++
0.22	13.0	12.0	7.5	10.0	0.6	K122G224-6N++
0.27	18.0	15.0	9.0	15.0	0.8	K122G274-8Q+
0.33	18.0	15.0	9.0	15.0	0.8	K122G334-8Q+
0.39	18.0	15.0	9.0	15.0	0.8	K122G394-8Q+
0.47	18.0	15.0	9.5	15.0	0.8	K122G474-8Q+
0.56	18.0	15.0	9.5	15.0	0.8	K122G564-8Q+
0.68	18.0	15.0	9.6	15.0	0.8	K122G684-8Q+
0.82	18.0	15.0	9.6	15.0	0.8	K122G824-8Q+
1.0	23.0	20.0	10.0	20.0	0.8	K122G105-8S++
1.2	23.0	20.0	11.5	20.0	0.8	K122G125-8S++
1.5	29.0	25.5	11.5	25.0	0.8	K122G155-8V++
1.8	29.0	25.5	11.5	25.0	0.8	K122G185-8V++
2.2	29.0	25.5	11.5	25.0	0.8	K122G225-8V++
2.7	29.0	25.5	11.5	25.0	0.8	K122G275-8V++
3.3	25.5	20.8	10.7	22.5	0.8	K122G335-8U++

630Vdc						
容量 (μ F)	W (max)	H (max)	T (max)	P	d	产品代码 Part number
0.010	9.8	7.6	3.9	7.5	0.5	K122J103-5I++
0.015	9.8	7.6	3.9	7.5	0.5	K122J153-5I++
0.022	9.8	8.1	4.4	7.5	0.5	K122J223-5I++
0.033	9.8	9.2	4.9	7.5	0.5	K122J333-5I++
0.047	9.8	10.5	5.3	7.5	0.5	K122J473-5I++
0.068	9.8	11.9	6.0	7.5	0.5	K122J683-5I++
0.10	9.8	13.1	7.2	7.5	0.5	K122J104-5I++
0.047	12.5	9.6	4.5	10.0	0.6	K122J473-6N++
0.068	12.5	10.3	5.2	10.0	0.6	K122J683-6N++
0.10	12.5	11.2	6.1	10.0	0.6	K122J104-6N++
0.15	12.5	13.9	6.4	10.0	0.6	K122J154-6N++
0.22	12.5	15.3	7.8	10.0	0.6	K122J224-6N++
0.10	17.8	10.6	4.6	15.0	0.8	K122J104-8Q++
0.15	17.8	12.5	5.1	15.0	0.8	K122J154-8Q++
0.22	17.8	13.5	6.0	15.0	0.8	K122J224-8Q++
0.33	17.8	14.8	7.4	15.0	0.8	K122J334-8Q++
0.47	17.8	16.3	8.8	15.0	0.8	K122J474-8Q++
0.68	17.8	19.1	10.0	15.0	0.8	K122J684-8Q++
1.0	17.8	22.3	11.7	15.0	0.8	K122J105-8Q++
1.5	17.8	25.4	14.7	15.0	0.8	K122J155-8Q++
0.22	25.5	11.2	5.2	22.5	0.8	K122J224-8U++
0.33	25.5	12.2	6.3	22.5	0.8	K122J334-8U++
0.47	25.5	14.3	6.8	22.5	0.8	K122J474-8U++
0.68	25.5	15.7	8.2	22.5	0.8	K122J684-8U++
1.0	25.5	19.5	8.9	22.5	0.8	K122J105-8U++
1.5	25.5	21.8	11.1	22.5	0.8	K122J155-8U++
2.2	25.5	14.4	13.8	22.5	0.8	K122J225-8U++

产品编码说明 Part number system

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

<p>第 1~3 位 型号代码 K12=CL21X</p> <p>第 4~5 位 额定电压 1H=50V,1J=63V,2A=100V, 2E=250V,2G=400V,2J=630V</p> <p>第 6~8 位 标称容量 例如: 102=10*10²pF=0.001μF</p> <p>第 9 位 容量偏差 J=±5%,K=±10%, M=±20%</p> <p>第 10 位 引线线径 d 5=0.5mm,6=0.6mm,8=0.8mm</p> <p>第 11 位 引出端脚距 D=5.0mm,l=7.5mm,N=10mm, Q=15mm,S=20mm,U=22.5mm, V=25mm</p> <p>第 12~15 位 引线加工及包装代码 (表 2)</p> <p>第 16 位 引线特征码 (表 1) 例如: A=A 型, B=B 型, C=C 型</p> <p>第 17 位 内部特征码</p>	<p>Digit 1 to 3: Series code of film capacitor K12=CL21X</p> <p>Digit 4 to 5: Rated Voltage 1H=50V,1J=63V,2A=100V, 2E=250V,2G=400V,2J=630V</p> <p>Digit 6 to 8: Rated capacitance value e.g: 102=10*10²pF=0.001μF</p> <p>Digit 9: Capacitance tolerance J=±5%,K=±10%, M=±20%</p> <p>Digit 10: Lead wire diameter d 5=0.5mm,6=0.6mm,8=0.8mm</p> <p>Digit 11: Pitch D=5.0mm,l=7.5mm,N=10mm, Q=15mm,S=20mm,U=22.5mm V=25mm</p> <p>Digit 12 to 15:Lead form and packing codes (figure 2)</p> <p>Digit 16: Forming lead shapes (figure 1) e.g: A=A, B=B, C=C</p> <p>Digit 17: Internal use</p>
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表 1 Figure 1:

代码 Code	A	B	C	D	E
引线形状 Forming shape					
适用范围 Applicable range	$P \geq F$		$P \leq F$		P
	$0\text{mm} \leq P - F \leq 3\text{mm}$	$3\text{mm} < P - F \leq 8\text{mm}$	$3\text{mm} < F - P \leq 5\text{mm}$	$0\text{mm} < F - P \leq 3\text{mm}$	
尺寸标准 Dimension standards	A $\leq 5.0\text{mm}$; B 允许偏差为 $\pm 0.5\text{mm}$; The permissible tolerance of 'B' is $\pm 0.5\text{mm}$ L 允许偏差为 $\pm 5\text{mm}$; The permissible tolerance of 'L' is $\pm 5\text{mm}$ F 允许偏差为 $\pm 1.0\text{mm}$; The permissible tolerance of 'F' is $\pm 1.0\text{mm}$ P 允许偏差为 $\pm 1.0\text{mm}$ The permissible tolerance of 'P' is $\pm 1.0\text{mm}$				

表 2 引线加工和包装代码 Figure 2: :Lead form and packing codes

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	D	F=5.0mm	1	表示弯脚 Kinked	A	产品在连续的两个载带孔之间 当引线脚距5/7.5mm 时, 产品之间的距离为12.7mm, 产品底部与载孔距离20mm Each cap. between two consecutive holes P3=12.7mm,H=20.0mm (For pitch5/7.5mm)
		I	F=7.5mm				
		N	F=10.0mm	2	表示直脚 Straight	B	载带孔在产品的引线间 当引线脚距10/15mm 时, 产品之间的距离为25.4mm, 产品底部与载孔距离20mm Holes between cap P3=25.4mm,H=20.0mm (For pitch 10/15 mm)
		Q	F=15.0mm				
F	引线成型 Lead kinked	D	F=5.0mm	0	B=4.5mm	0	B 的长度偏差 $\pm 0.5\text{mm}$ B Length tolerance $\pm 0.5\text{mm}$
		I	F=7.5mm				
		N	F=10.0mm				
		Q	F=15.0mm				
L	直脚包装 Straight lead	代码 Code	说明 explanation	0	0	0	引线长度偏差 $\pm 0.5\text{mm}$ Length tolerance $\pm 0.5\text{mm}$
		45	引线长度 lead length 4.5mm				

第 12~15 位代码为“K000”时, 表示标准引线长度 38mm min

When Digit 12 to 15 is K000 means standard lead length is 38mm min