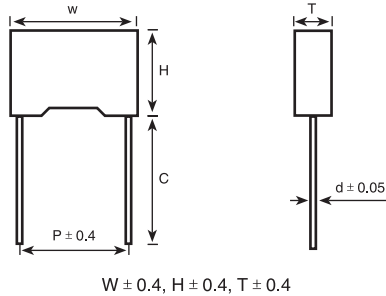


塑料外壳金属化聚酯膜电容器 Metallized polyester film capacitor(Box-type)

■ 外形图 Outline Drawing



■ 特点

- 可靠性高
- 金属化聚酯膜，无感卷绕结构
- 塑料外壳(UL94 V-0)，阻燃环氧填充

■ 主要用途

- 旁路，隔直，耦合，退耦
- 脉冲，逻辑，定时，振荡电路
- 低电压场合抗干扰

■ 技术要求 Specifications

■ Features

- High reliability
- Metallized polyester film, non-inductive wound construction
- Plastic case(UL94 V-0), Epoxy resin sealing

■ Typical Applications

- By-passing, blocking, coupling, decoupling,
- Pulse, logic, timing, oscillator circuits.
- Interference suppression in low voltage application (i.e. automotive)

引用标准 Reference Standard	GB/T 7332 (IEC 60384-2)					
气候类别 Climatic Category	55/105/56					
额定温度 Rated Temperature	85℃					
工作温度范围 Operating Temperature Range	-55℃ ~ 105℃ (+85℃ to +105℃: decreasing factor 1.25% per °C for V_R (dc))					
额定电压 Rated Voltage	63V、100V、160V、250V、400V、630V					
电容量范围 Capacitance Range	0.0033μF~33.0μF					
电容量偏差 Capacitance Tolerance	± 5%(J), ± 10%(K), ± 20%(M)					
耐电压 Voltage Proof	1.6 U_R (5s)					
损耗角正切 Dissipation Factor	测试频率 Frequency	$C_R \leq 0.1\mu F$		$C_R > 0.1\mu F$		
	1kHz	≤ 1.0%		≤ 1.0%		
	10kHz	≤ 1.5%		≤ 1.5%		
	100kHz	≤ 3.0%				
绝缘电阻 Insulation Resistance	$U_R > 100V$	≥ 30 000MΩ, $C_R \leq 0.33\mu F$ ≥ 10 000s, $C_R > 0.33\mu F$			(20℃, 100V, 1min)	
	$U_R \leq 100V$	≥ 15 000MΩ, $C_R \leq 0.33\mu F$ ≥ 5 000s, $C_R > 0.33\mu F$			(20℃, 10V, 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 。 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
	63	7.5	6	3	2	1
	100	15	9	5	3	2
	250	30	20	12	8	5
	400	40	30	20	10	7
630	50	40	25	12	-	



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:

C23 Pattern II (Reduced size)

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

第1~3位	型号代码 C23= CL23	Digit 1 to 3	Series code C23= CL23
第4~5位	直流额定电压 1J=63V 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V	Digit 4 to 5	DC rated voltage 1J=63V 2A=100V 2C=160V 2E=250V 2G=400V 2J=630V
第6~8位	标称容量 举例: 103=10 × 10 ³ pF=0.01μF	Digit 6 to 8	Rated capacitance value For example: 103=10 × 10 ³ pF=0.01μF
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 B=27.5mm	Digit 10	Pitch 3=7.5mm 4=10.0mm 6=15.0mm 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

■ Table1 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	3	F=7.5mm	0	表示直脚 straight	1	产品在连续的两个载带孔之间 each cap. among two consecutive holes P3=12.7mm,H=18.5mm (For pitch=7.5mm)
		4	F=10.0mm			5	P3=25.4mm;H=18.5mm (For pitch=10/15mm) (Detail parameter refer to pag 17)
C	直脚 straight lead "C" 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
		00	标准的引线长度(18mm~26mm) standard lead length				
		45	引线长度 4.5mm lead length 4.5mm				

■ 外形尺寸 Dimensions(mm)
Pattern II (Reduced sizes)

63Vdc(40Vac)							100Vdc(63Vac)							250Vdc(160Vac)						
容量 (μF)	W	H	T	P	d	产品代码 Part number	容量 (μF)	W	H	T	P	d	产品代码 Part number	容量 (μF)	W	H	T	P	d	产品代码 Part number
0.47	10.5	8.5	3.5	7.5	0.5	C231J474-3S****++	0.22	10.5	8.5	3.5	7.5	0.5	C232A224-3S****++	0.068	10.5	8.5	3.5	7.5	0.5	C232E683-3S****++
0.68	10.5	8.5	3.5	7.5	0.5	C231J684-3S****++	0.33	10.5	9.0	4.0	7.5	0.6	C232A334-3S****++	0.10	10.5	8.5	3.5	7.5	0.5	C232E104-3S****++
1.0	10.5	11.0	5.0	7.5	0.6	C231J105-3S****++	0.47	10.5	9.0	4.0	7.5	0.6	C232A474-3S****++	0.15	10.5	9.0	4.0	7.5	0.6	C232E154-3S****++
1.5	10.5	12.0	6.0	7.5	0.6	C231J155-3S****++	0.68	10.5	11.0	5.0	7.5	0.6	C232A684-3S****++	0.22	10.5	11.0	5.0	7.5	0.6	C232E224-3S****++
1.8	10.5	12.0	6.0	7.5	0.6	C231J185-3S****++	1.0	10.5	12.0	6.0	7.5	0.6	C232A105-3S****++	0.27	10.5	12.0	6.0	7.5	0.6	C232E274-3S****++
0.10	13.0	9.0	4.0	10.0	0.6	C231J104-4S****++	0.10	13.0	9.0	4.0	10.0	0.6	C232A104-4S****++	0.33	10.5	12.0	6.0	7.5	0.6	C232E334-3S****++
0.15	13.0	9.0	4.0	10.0	0.6	C231J154-4S****++	0.15	13.0	9.0	4.0	10.0	0.6	C232A154-4S****++	0.033	13.0	9.0	4.0	10.0	0.6	C232E333-4S****++
0.22	13.0	9.0	4.0	10.0	0.6	C231J224-4S****++	0.22	13.0	9.0	4.0	10.0	0.6	C232A224-4S****++	0.047	13.0	9.0	4.0	10.0	0.6	C232E473-4S****++
0.33	13.0	9.0	4.0	10.0	0.6	C231J334-4S****++	0.33	13.0	9.0	4.0	10.0	0.6	C232A334-4S****++	0.068	13.0	9.0	4.0	10.0	0.6	C232E683-4S****++
0.47	13.0	9.0	4.0	10.0	0.6	C231J474-4S****++	0.47	13.0	9.0	4.0	10.0	0.6	C232A474-4S****++	0.10	13.0	9.0	4.0	10.0	0.6	C232E104-4S****++
0.68	13.0	9.0	4.0	10.0	0.6	C231J684-4S****++	0.68	13.0	9.0	4.0	10.0	0.6	C232A684-4S****++	0.15	13.0	9.0	4.0	10.0	0.6	C232E154-4S****++
1.0	13.0	9.0	4.0	10.0	0.6	C231J105-4S****++	1.0	13.0	11.0	5.0	10.0	0.6	C232A105-4S****++	0.22	13.0	11.0	5.0	10.0	0.6	C232E224-4S****++
1.5	13.0	11.0	5.0	10.0	0.6	C231J155-4S****++	1.5	13.0	12.0	6.0	10.0	0.6	C232A155-4S****++	0.33	13.0	11.0	5.0	10.0	0.6	C232E334-4S****++
1.8	13.0	12.0	6.0	10.0	0.6	C231J185-4S****++	0.33	17.5	11.0	5.0	15.0	0.8	C232A334-6S****++	0.47	13.0	12.0	6.0	10.0	0.6	C232E474-4S****++
2.2	13.0	12.0	6.0	10.0	0.6	C231J225-4S****++	0.47	17.5	11.0	5.0	15.0	0.8	C232A474-6S****++	0.10	17.5	11.0	5.0	15.0	0.8	C232E104-6S****++
0.68	17.5	11.0	5.0	15.0	0.8	C231J684-6S****++	0.68	17.5	11.0	5.0	15.0	0.8	C232A684-6S****++	0.15	17.5	11.0	5.0	15.0	0.8	C232E154-6S****++
1.0	17.5	11.0	5.0	15.0	0.8	C231J105-6S****++	1.0	17.5	11.0	5.0	15.0	0.8	C232A105-6S****++	0.22	17.5	11.0	5.0	15.0	0.8	C232E224-6S****++
1.5	17.5	11.0	5.0	15.0	0.8	C231J155-6S****++	1.5	17.5	12.0	6.0	15.0	0.8	C232A155-6S****++	0.33	17.5	11.0	5.0	15.0	0.8	C232E334-6S****++
1.8	17.5	11.0	5.0	15.0	0.8	C231J185-6S****++	1.8	17.5	12.0	6.0	15.0	0.8	C232A185-6S****++	0.47	17.5	11.0	5.0	15.0	0.8	C232E474-6S****++
2.2	17.5	11.0	5.0	15.0	0.8	C231J225-6S****++	2.2	17.5	12.0	6.0	15.0	0.8	C232A225-6S****++	0.68	17.5	12.0	6.0	15.0	0.8	C232E684-6S****++
3.3	17.5	12.0	6.0	15.0	0.8	C231J335-6S****++	3.3	17.5	13.5	7.5	15.0	0.8	C232A335-6S****++	1.0	17.5	13.5	7.5	15.0	0.8	C232E105-6S****++
4.7	17.5	13.5	7.5	15.0	0.8	C231J475-6S****++	4.7	17.5	14.5	8.5	15.0	0.8	C232A475-6S****++	1.5	17.5	14.5	8.5	15.0	0.8	C232E155-6S****++
6.8	17.5	14.5	8.5	15.0	0.8	C231J685-6S****++	1.5	26.5	15.0	6.0	22.5	0.8	C232A155-9S****++	0.47	26.5	15.0	6.0	22.5	0.8	C232E474-9S****++
10.0	17.5	19.0	11.0	15.0	0.8	C231J106-6S****++	1.8	26.5	15.0	6.0	22.5	0.8	C232A185-9S****++	0.68	26.5	15.0	6.0	22.5	0.8	C232E684-9S****++
3.3	26.5	16.0	7.0	22.5	0.8	C231J335-9S****++	2.2	26.5	15.0	6.0	22.5	0.8	C232A225-9S****++	1.0	26.5	15.0	6.0	22.5	0.8	C232E105-9S****++
4.7	26.5	16.0	7.0	22.5	0.8	C231J475-9S****++	3.3	26.5	15.0	6.0	22.5	0.8	C232A335-9S****++	1.5	26.5	16.0	7.0	22.5	0.8	C232E155-9S****++
6.8	26.5	16.0	7.0	22.5	0.8	C231J685-9S****++	4.7	26.5	16.0	7.0	22.5	0.8	C232A475-9S****++	1.8	26.5	16.0	7.0	22.5	0.8	C232E185-9S****++
10.0	26.5	17.0	8.5	22.5	0.8	C231J106-9S****++	6.8	26.5	18.5	10.0	22.5	0.8	C232A685-9S****++	2.2	26.5	17.0	8.5	22.5	0.8	C232E225-9S****++
15.0	26.5	20.0	11.0	22.5	0.8	C231J156-9S****++	10.0	26.5	22.0	12.0	22.5	0.8	C232A106-9S****++	3.3	26.5	20.0	11.0	22.5	0.8	C232E335-9S****++
4.7	32.0	18.0	9.0	27.5	0.8	C231J475-BS****++	4.7	32.0	18.0	9.0	27.5	0.8	C232A475-BS****++	1.5	32.0	18.0	9.0	27.5	0.8	C232E155-BS****++
6.8	32.0	18.0	9.0	27.5	0.8	C231J685-BS****++	6.8	32.0	18.0	9.0	27.5	0.8	C232A685-BS****++	1.8	32.0	18.0	9.0	27.5	0.8	C232E185-BS****++
10.0	32.0	18.0	9.0	27.5	0.8	C231J106-BS****++	10.0	32.0	20.0	11.0	27.5	0.8	C232A106-BS****++	2.2	32.0	18.0	9.0	27.5	0.8	C232E225-BS****++
15.0	32.0	18.0	9.0	27.5	0.8	C231J156-BS****++								3.3	32.0	18.0	9.0	27.5	0.8	C232E335-BS****++
22.0	32.0	22.0	13.0	27.5	0.8	C231J226-BS****++								4.7	32.0	20.0	11.0	27.5	0.8	C232E475-BS****++
33.0	32.0	24.5	15.0	27.5	0.8	C231J336-BS****++								6.8	32.0	22.0	13.0	27.5	0.8	C232E685-BS****++

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 packing code (refer to table 1)



■ 外形尺寸 Dimensions(mm)

Pattern II (Reduced sizes)

400Vdc(200Vac)						
容量 (μ F)	W	H	T	P	d	产品代码 Part number
0.022	10.5	8.5	3.5	7.5	0.5	C232G223-3S****+++
0.033	10.5	8.5	3.5	7.5	0.5	C232G333-3S****+++
0.047	10.5	9.0	4.0	7.5	0.6	C232G473-3S****+++
0.068	10.5	11.0	5.0	7.5	0.6	C232G683-3S****+++
0.10	10.5	12.0	6.0	7.5	0.6	C232G104-3S****+++
0.010	13.0	9.0	4.0	10.0	0.6	C232G103-4S****+++
0.015	13.0	9.0	4.0	10.0	0.6	C232G153-4S****+++
0.022	13.0	9.0	4.0	10.0	0.6	C232G223-4S****+++
0.033	13.0	9.0	4.0	10.0	0.6	C232G333-4S****+++
0.047	13.0	9.0	4.0	10.0	0.6	C232G473-4S****+++
0.056	13.0	9.0	4.0	10.0	0.6	C232G563-4S****+++
0.068	13.0	11.0	5.0	10.0	0.6	C232G683-4S****+++
0.10	13.0	11.0	5.0	10.0	0.6	C232G104-4S****+++
0.15	13.0	12.0	6.0	10.0	0.6	C232G154-4S****+++
0.047	17.5	11.0	5.0	15.0	0.8	C232G473-6S****+++
0.068	17.5	11.0	5.0	15.0	0.8	C232G683-6S****+++
0.10	17.5	11.0	5.0	15.0	0.8	C232G104-6S****+++
0.15	17.5	11.0	5.0	15.0	0.8	C232G154-6S****+++
0.22	17.5	12.0	6.0	15.0	0.8	C232G224-6S****+++
0.33	17.5	13.5	7.5	15.0	0.8	C232G334-6S****+++
0.47	17.5	14.5	8.5	15.0	0.8	C232G474-6S****+++
0.68	17.5	16.0	10.0	15.0	0.8	C232G684-6S****+++
0.22	26.5	15.0	6.0	22.5	0.8	C232G224-9S****+++
0.33	26.5	15.0	6.0	22.5	0.8	C232G334-9S****+++
0.47	26.5	15.0	6.0	22.5	0.8	C232G474-9S****+++
0.68	26.5	16.0	7.0	22.5	0.8	C232G684-9S****+++
1.0	26.5	18.5	10.0	22.5	0.8	C232G105-9S****+++
1.5	26.5	22.0	12.0	22.5	0.8	C232G155-9S****+++
0.68	32.0	18.0	9.0	27.5	0.8	C232G684-BS****+++
1.0	32.0	18.0	9.0	27.5	0.8	C232G105-BS****+++
1.5	32.0	20.0	11.0	27.5	0.8	C232G155-BS****+++

630Vdc(220Vac) [®]						
容量 (μ F)	W	H	T	P	d	产品代码 Part number
0.0047	10.5	8.5	3.5	7.5	0.5	C232J472-3S****+++
0.0068	10.5	8.5	3.5	7.5	0.5	C232J682-3S****+++
0.010	10.5	8.5	3.5	7.5	0.5	C232J103-3S****+++
0.015	10.5	9.0	4.0	7.5	0.6	C232J153-3S****+++
0.022	10.5	11.0	5.0	7.5	0.6	C232J223-3S****+++
0.033	10.5	12.0	6.0	7.5	0.6	C232J333-3S****+++
0.0047	13.0	9.0	4.0	10.0	0.6	C232J472-4S****+++
0.0068	13.0	9.0	4.0	10.0	0.6	C232J682-4S****+++
0.010	13.0	9.0	4.0	10.0	0.6	C232J103-4S****+++
0.015	13.0	9.0	4.0	10.0	0.6	C232J153-4S****+++
0.022	13.0	9.0	4.0	10.0	0.6	C232J223-4S****+++
0.033	13.0	11.0	5.0	10.0	0.6	C232J333-4S****+++
0.047	13.0	11.0	5.0	10.0	0.6	C232J473-4S****+++
0.068	13.0	12.0	6.0	10.0	0.6	C232J683-4S****+++
0.033	17.5	11.0	5.0	15.0	0.8	C232J333-6S****+++
0.047	17.5	11.0	5.0	15.0	0.8	C232J473-6S****+++
0.068	17.5	11.0	5.0	15.0	0.8	C232J683-6S****+++
0.10	17.5	12.0	6.0	15.0	0.8	C232J104-6S****+++
0.15	17.5	13.5	7.5	15.0	0.8	C232J154-6S****+++
0.22	17.5	16.0	10.0	15.0	0.8	C232J224-6S****+++
0.33	17.5	19.0	11.0	15.0	0.8	C232J334-6S****+++
0.10	26.5	15.0	6.0	22.5	0.8	C232J104-9S****+++
0.15	26.5	15.0	6.0	22.5	0.8	C232J154-9S****+++
0.22	26.5	16.0	7.0	22.5	0.8	C232J224-9S****+++
0.33	26.5	16.0	7.0	22.5	0.8	C232J334-9S****+++
0.47	26.5	17.0	8.5	22.5	0.8	C232J474-9S****+++
0.68	26.5	22.0	12.0	22.5	0.8	C232J684-9S****+++

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 packing code(refer to table 1)
 3. “®” Not suitable for across-the-line applications. Pls refer to Interference Suppression Capacitors(Pag. 126)