



Guang Zhou Nan Cai Electronic CO.,LTD.  
<http://www.cgznc.com>



# 規格承認書

## (SPECIFICATION FOR APPROVAL)

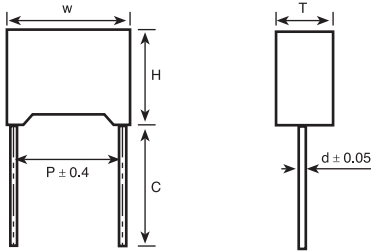
File No.: Q/BH .TS16949.13TECH1303

Product Name: Double sided metallized polypropylene film capacitor(Box-type)  
Product Type: C82 (MMKP82)  
Product Code: C82  
Customer:  
Customer Code:  
Issue Date: (V3.0)

## 塑料外壳双面金属化聚丙烯膜电容器

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

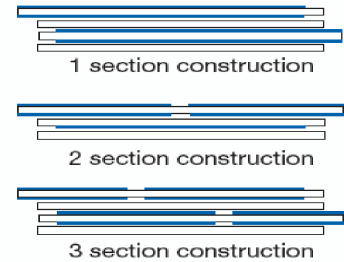
### ■ 外形图 Outline Drawing



$$W \pm 0.4, H \pm 0.4, T \pm 0.4$$



Three different winding constructions are used, depending on voltage and lead spacing. They are specified in the article table.



### ■ 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
- 电视机中S校正和行逆程波形和显示器中
- 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 circuit

### ■ Typical Applications

- widely used in high voltage, high frequency and pulse circuit
- Deflection circuits in TV-sets(S-correction and fly-back tuning )and monitors
- Lamp capacitor for electronic ballast 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℃ for $U_R$ (dc); 75℃ for $U_R$ (ac)					
工作温度 Operating Temperature Range	-40℃~105℃ (+85℃ to +105℃: decreasing factor 1.25% per ℃ for $U_R$ (dc)) (+75℃ to +105℃: decreasing factor 1.35% per ℃ 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	≤ 0.0010 (1kHz, 20℃)					
绝缘电阻 Insulation Resistance	≥ 100 000MΩ $C_R \leq 0.33\mu F$ ≥ 30 000s $C_R > 0.33\mu F$ (20℃, 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 $U_R/U$ 。 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	



C82  
MMKP82 series

**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 C82= MMKP82	Digit 1 to 3	Series code C82= MMKP82
第4~5位	直流额定电压 2E=250V 2G=400V 2J=630V 3A=1 000V 3C=1 600V 3D=2 000V	Digit 4 to 5	DC rated voltage 2E=250V 2G=400V 2J=630V 3A=1 000V 3C=1 600V 3D=2 000V
第6~8位	标称容量 举例: 103=10 × 10 <sup>3</sup> pF=0.01μF	Digit 6 to 8	Rated capacitance value For example: 103=10 × 10 <sup>3</sup> pF=0.01μF
第9位	容量偏差 G= ± 2%, H= ± 3%, J= ± 5% K= ± 10%, M= ± 20%	Digit 9	Capacitance tolerance G= ± 2%, H= ± 3%, 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 6	F=10.0mm F=15.0mm			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				



**C82**  
MMKP82 series

**Guang Zhou Nan Cai Electronic CO.,LTD.**  
<http://www.cgznc.com>

■ 外形尺寸 Dimensions(mm)

250Vdc(180Vac)						
C <sub>R</sub> (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)@						
C <sub>R</sub> (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 packaging code(refer to table 1)  
 3. “@”不用作跨线,请参见抗干扰电容器(Pag.116)  
 “@” Not suitable for across-the-line applications. Pls refer to Interference Suppression Capacitors(Pag. 116)



C82  
MMKP82 series

■ 外形尺寸 Dimensions(mm)

630Vdc(400Vac)						
C <sub>R</sub> (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>R</sub> (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 packaging code(refer to table 1)

