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版本 VERSION	变更说明 REVISION NTOE	变更人 CHANGED BY	变更日期 REV DATE
A	首次发行!厂商: 威庆; 品名为: MMKP82 683J/1000V P=15MM First release! Manufacturer: Weiqing Product name: MMKP82 683J/1000V P=15MM	练俊辉	08/25/2026
B			
C			
D			
E			

料号: 7ECBC68301
PART NO.

设计: 练俊辉 08/25/2026
DESIGNED BY

审核: 鲜于万桥 08/25/2026
CHECKED BY

批准: 周海生 08/25/2026
APPROVED BY



东莞市威庆电子有限公司

DONGGUAN WEIQING ELECTRONIC CO., LTD

SPEC NO.:2026081101

REV:B

承认书

SPECIFICATION

客户名称(CUSTOMER) : 东莞华明灯具有限公司

产品名称(PRODUCT NAME) : MMKP82

承认规格(APPROVE ITEM) : 683J/1000V P=15MM L=3.5MM D4 盒 灰色 铜线

威庆料号(WEIQING PART NO.) : C383A683JD4H035J40

客户料号(CUSTOMER PART NO.) :

送样日期(SUBMIT THE SAMPLE DATE) : 2026-8-11

产品尺寸(PRODUCT SIZE) : W:18*H:14.5*T:8.5mm

样品印字(SAMPLE PRINT) : WQC/MMKP82/683J1000V

威庆确认表

WEIQING CONFIRM LIST

APPROVED	CHECKED	PREPARED
 魏桂亮	雷斌	何湘华

客户承认结果

CUSTOMER ACKNOWLEDGE THE RESULT

地址：中国东莞松山湖高新技术产业开发区科技十路7号12栋

Add: Building 12.No.Tenth Road of Science&Technolgy,DongGuan SongShanLake High-tech Industrial Development Zone China

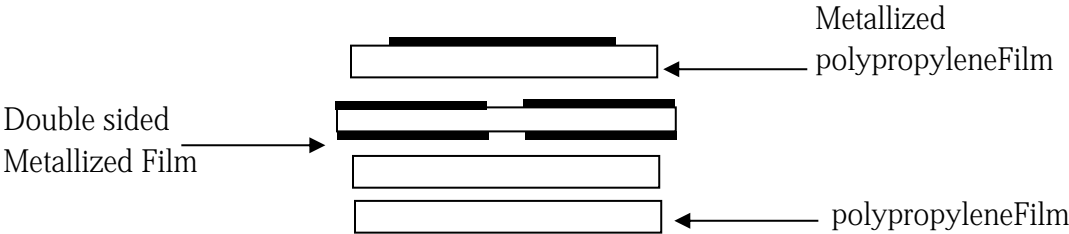
TEL: 0769- 88956188/88956198 FAX: 0769- 88956168

WQC 东莞市威庆电子有限公司		制作日期	2026-08-11	版本	01
文件名称	MMKP82 Approval Sheet (Double sided Metallized Polypropylene Film Capacitor(BOX))	文件编号	WQC-AP-14	页次	10/01

1. Scope:

This specification applied to capacitor for type MMC(Double sided Metallized Polypropylene Film Capacitor(BOX))

1-1Section View



1-2 case:Flame-retardantPBT(UL94V-0) ,Epoxy resin coating (UL 94 V-0)

2. Temperature

2-1 Rated Temperature : 105℃

2-2 Rated Temperature Range : -40 ~ +105 (+85℃ to +105℃ decreasing factor 1.25% per ℃ for VR(DC))

3. Capacitance Range:

0.0001uF ~ 1 uF

4. Capacitance Tolerance:

±2%(G)、±3%(H)、±5%(J)、±10%(K)、±20%(M)

5. Rated Voltage:

630VDC、1000VDC、1250VDC、1600VDC、2000VDC、2500VDC、3000VDC

6. 产品编码说明 Film Capacitor Part number system

18 位元产品代码如下 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	3	8	3	A	6	8	3	J	D	4	H	0	3	5	J	4	0

Digit 1~3 Type Code

第 1~3 位 型号代码

代码 Code	型号 Type	代码 Code	型号 Type	代码 Code	型号 Type	代码 Code	型号 Type
C11	CL11	C30	CBB20				
C12	CH11	C31	CBB21				
C20	CL20	C32	CBB22				
C21	CL21	C33	CBB23				
C22	CL21X	C34	CBB81				
C23	CL23	C38	MMKP82				
C24	CL23B						

第 6~8 容值代码

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The first 2digits indicate significant figures,and the third digit specifies the number of zero to follow. 前两位表示基数，第三个数位表示其后零的个数 This gives the capacitance in picofarads.容量值单位元为皮法 For examples 举例： 102=10*10 ² PF=1,000PF=1.0nF=0.001uF 105=10*10 ⁵ PF=1,000,000PF=1000nF=1uF Digit 9 Capacitance Tolerance Code 第 9 容量偏差代码										
公差 Tolerance		± 1%	± 2%	± 3%	± 5%	± 10%	± 20%	+80%/-20%		
代码 Code		F	G	H	J	K	M	Z		
Digit 10~11 Box Case No. Or Pitch expressed by Case two digits Code 第 10~11 盒体或两个数位的脚距代码 Box Type 盒装型										
Pitch 脚距	7.5	10	12.5	15	20	22.5	27.5	37.5	42.5	55
Case No. 壳体代码	B*	C*	G*	D*	S*	E*	F*	J*	K*	P*
Powder Coating Type 粉涂型										
Pitch 脚距	2.5	5.0	7.5	10	15	20	22.5	27.5		
Case No. 脚距代码	02	05	07	10	15	20	22	27		
Axial Type 轴向型										
Code 代码		Axial Type 轴向型								
A1		轴向椭圆形								
A2		轴向圆形								
Digit 12 Lead Form Code 第 12 引线加工型代码 Lead Type										
Code 代码	L	H	K	N	M	T	S			
Lead Type 引线型式	长脚	短脚	内弯青蛙脚	内弯直脚	外弯直脚	Taping	Customer Require	Special		
Digit 13~15 Lead Length(Straight) and Tolerance of Lead Length(straight): Expressed in 3-Letter Code 第 13~15 引线长度和偏差以 3 个数位代码表示 Example 举例：Code 代码 035:35/10=3.5mm 230:230/10=23mm										
Digit 16~18 Internal use packing\material group\place of production\ product grade\Environmental Protection(EP) Class (Halogen-Free Compliant ROHS Compliant) Code 第 16~18 内部特征码										

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No	Test items	Performance	Test Method
7-1	Withstand voltage (Between Terminals)	Shall be no abnormality	150% Of Rated Voltage, 60sec.
	Between terminal and Enclosure	Shall be no abnormality	$UR \times 200\% + 1000VDC$, 60sec.
7-2	Insulation resistance (Between Terminals)	$IR \geq 15,000M\Omega$	Measured at $100 \pm 15VDC$, For 60sec / $25^{\circ}C$
7-3	Capacitance	Within the tolerance specified	1KHz, 1Vrms Max. at $25^{\circ}C$
7-4	Dissipation Factor	0.001 (0.1%) Max.	1KHz, 1Vrms Max. at $25^{\circ}C$
7-5	Tense Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 1.0 Kg 2. Holding Time : 10 ± 1 sec
7-6	Bending Strength of Terminal	No wire breakage and No Damage of Capacitor	1. Load Force : 0.5 Kg 2. Bending Time : $4 \times 90^{\circ}$ in 5sec
7-7	Solder-ability	1. Appearance : No Visible Damage 2. Covering an area of > solder 95%	Soldering Peocess 1.Capacitor preheating temperature of $T < 120^{\circ}C$ 2.Preheating time capacitor $t < 5$ min Single wave soldering 1.Solder temperature: $270 \pm 5^{\circ}C$ 2.Solder time: 2 ± 0.5 sec
7-8	Heat Shock test	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 3\%$ of The Initial Value	The terminal of capacitor shall be immersed in the melting solder. a. Solder temperature: $270 \pm 5^{\circ}C$ b. Solder time: 3 ± 0.5 sec c. Test Voltage: 100% of The Rate Voltage For 1min.

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No	Test items	Performance	Test Method		
7-9	Cold Resistance	(1) Appearance : No Visible Damage (2) Capacitance Change : $\leq 0\sim -10\%$ of The Initial Value	a. Test Temperature: -40°C b. Test Times: 2Hrs		
7-10	Dry Heat Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq +5\sim -2\%$ Of The Initial Value	a. TEST TEMPERATURE: $105^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. Test Times: 2Hrs		
7-11	Humidity Resistance	(1) Appearance : No Visible Damage (2) Withstand Voltage : Normal (3) Capacitance Change : $\leq \pm 10\%$ of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value (5) DF ($\tan \delta$) ≤ 0.001	a. TEST TEMPERATURE: $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. RELATIVE HUMIDITY: $90 \sim 95\%$ c. Test Times: 240 ± 8 HRS d. TEST VOLTAGE: 125% of The Rated Voltage for 1 min.		
7-12	Heat Resistance (Charge & Discharge)	(1) Appearance : No Visible Damage (2) DF ($\tan \delta$) ≤ 0.001 (3) Capacitance Change : $\pm 10\%$ of TheInitial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value	a. Test Voltage : Rated Voltage Charge for 2sec. Discharge for 2 sec. Repeated For 1000 ± 100 cycles b. Test Temperature: $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$		
7-13	Heat Resistance (Continuous)	(1) Appearance : No Visible Damage (2) DF ($\tan \delta$) ≤ 0.001 (3) Capacitance Change : $\pm 10\%$ of The Initial Value (4) Insulation Resistance: $\geq 50\%$ of the rated value	a. Test Temperature: $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ b. Test Times: 500 ± 24 Hrs c. TEST VOLTAGE: 125% of The Rated Voltage		

文件名称

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Film Capacitor(BOX))

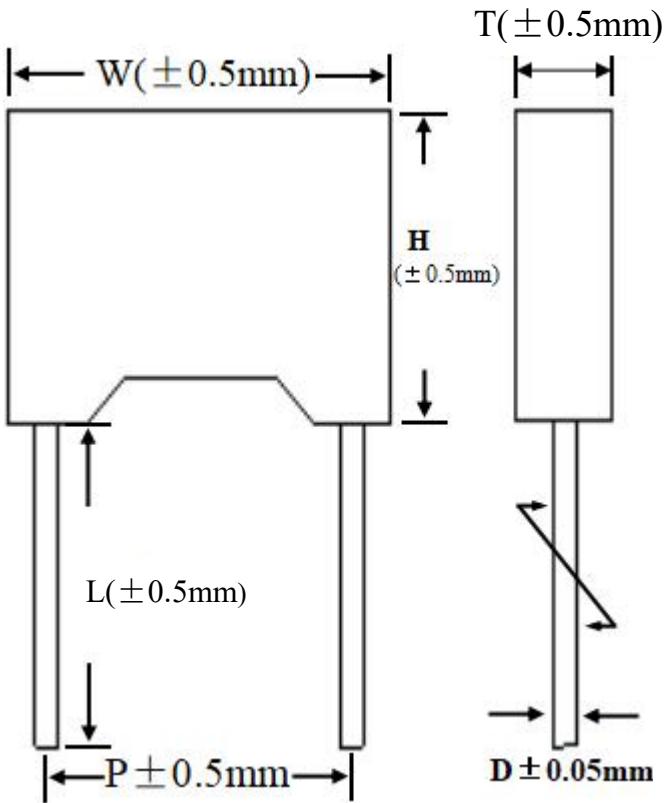
文件编号

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8. Dimensions:

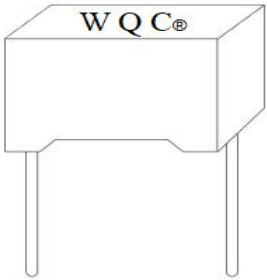
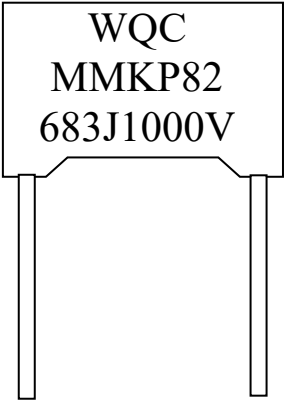


CAPACITOR BODY SIZE (Unit:mm)								
CAP	RV	BOX TYP E	W ± 0.5	H ± 0.5	T ± 0.5	D ± 0.05	L ± 0.5	P ± 0.5
683 J	1000 V	D4	18	14.5	8.5	0.8 铜线	3.5	15

Lead Style						
L		H	K	N	M	T
						TAPING (refer to next page)
CAP	RV	Lead Style	L model-A section(±3mm) H.K.N.M model-A section (±0.5mm)		K.N.M model-B section (±0.5mm)	Customer Require
683J	1000V	H	3.5mm			P(±0.5mm) 15mm

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9. Marking:



WQC	WEIQING CO. LOGO
MMKP82	DOUBLE SIDED MEATALLIZED POLYPROPYLENE FILM CAPACITORC
683	CAPACITANCE
J	CAPACITANCE TOLERANCE
1000	RATED VOLTAGE
V	DC VOLTAGE
备注	盒子顶部有 WQC(LOGO)

10. PACKING:

CAP	R.V.	Pcs / Bag	Pcs/Taping Box (For Taping Style)	Pcs / Box (L:35Cm XH:35Cm X T:35Cm)
683J	1000V	/PCS		K/PCS

11.Storage conditions and duration

Packaged capacitors should be kept in clean, ventilated, dry coffers, not near the heat source, not subject to direct sunlight, is strictly prohibited and chemical reagents, acid and harmful gas storage together.
Capacitor at a temperature within the range 20 ~ 25 °C, humidity less than 50% of the state of storage for one year.

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12.单峰波峰焊

参照标准: IEC-60384-14

SINGLE WAVE SOLDERING CONDITIONS

组件: 薄膜电容器

Component: Film Capacitors

1. 焊接的建议 Soldering Suggestion:

当焊接电容器时, 焊锡热会通过导线端子高温和封装层传递到电容器素子, 因此必须注意高温和长时间焊接引起的电容器特性衰减或损坏, 请确认焊锡在以下温度范围内。

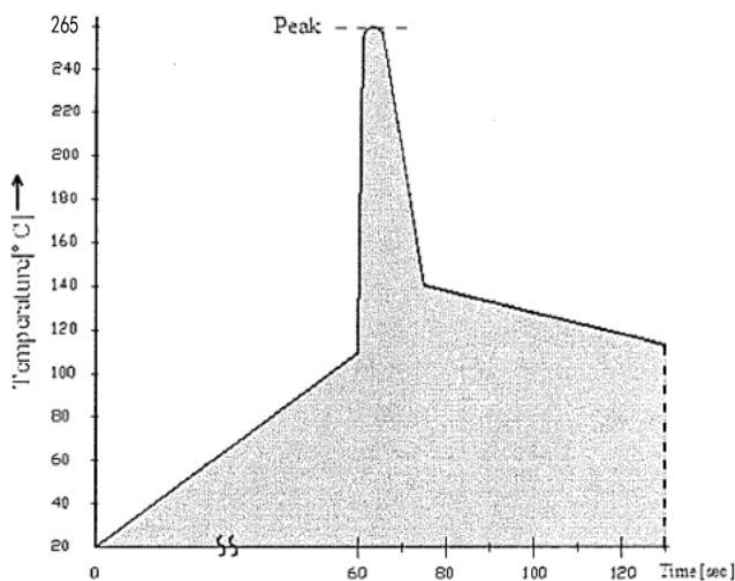
When solder a capacitor, heat in soldering is conducted to the element of the capacitor from wire lead and an enclosure, and hence it should be noted that soldering under high temperature and a long period may cause deterioration of breakdown of capacitors. Be sure to solder within the following temperature condition range.

2. 推荐环境条件 Recommendable Condition:

a.最高预热温度: $\leq 110^{\circ}\text{C}$ Preheating max temperature: $\leq 110^{\circ}\text{C}$ b.最大预热时间: ≤ 60 秒Preheating max time: $\leq 60\text{sec.}$ c.温度: $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Temperature: $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$

d.

温度曲线项目	SnPb 合金	无铅合金 (SAC 、SbCu 合金)
驻留时间 (板厚在 1.5mm~2.25mm[0.060in ~0.090in])	2s~4s	3s~5s
驻留时间 (板厚 > 2.25mm[0.090in])	4s~8s	5s~10s



3. 手工焊接 Hand Soldering:

a. 烙铁最高温度 Soldering iron top temperature: $\leq 350^{\circ}\text{C}$ b. 焊接时间 Soldering tim: $\leq 3\text{sec.}$

4. 如果需要焊接两次, 第二次焊接必须等到电容器恢复到常温。建议时间 24 小时。

If re-work or dipping twice in necessary, it should be done after the capacitor returned to the normal temperature. Suggestion time is 24 hours.

5. 回流焊接 Reflow Solder

不适合回流焊接 Not suitable for reflow soldering.

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13: 双峰波峰焊

参照标准：IEC-60384-14

DOUBLE WAVE SOLDERING CONDITIONS

组件：薄膜电容器

Component: Film Capacitors

1.焊接的建议 Soldering Suggestion:

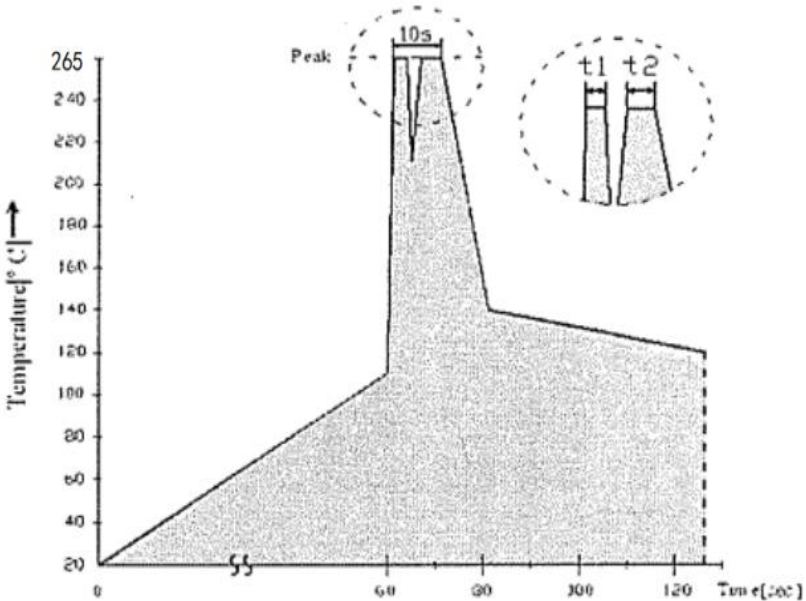
当焊接电容器时，焊锡热会通过导线端子高温和封装层传递到电容器素子，因此必须注意高温和长时间焊接引起的电容器特性衰减或损坏，请确认焊锡在以下温度范围内。

When solder a capacitor, heat in soldering is conducted to the element of the capacitor from wire lead and an enclosure, and hence it should be noted that soldering under high temperature and a long period may cause deterioration of breakdown of capacitors. Be sure to solder within the following temperature condition range.

2.推荐环境条件 Recommendable Condition:

- a.最高预热温度：≤110℃
Preheating max temperature: ≤110℃
- b.最大预热时间：≤60 秒
Preheating max time: ≤60sec.
- c.温度：260℃±5℃
Temperature: 260℃±5℃
- d.

温度曲线项目	SnPb 合金 (T1+T2)	无铅合金 (SAC 、SbCu 合金)
驻留时间 (板厚在 1.5mm~2.25mm[0.060i n~0.090in])	2s~4s	3s~5s
驻留时间 (板厚 > 2.25mm[0.090in])	4s~8s	5s~10s



3.手工焊接 Hand Soldering:

- a. 烙铁最高温度 Soldering iron top temperature: ≤350℃
- b. 焊接时间 Soldering time: ≤3sec.

4.如果需要焊接两次，第二次焊接必须等到电容器恢复到常温。建议时间 24 小时。

If re-work or dipping twice in necessary, it should be done after the capacitor returned to the normal temperature. Suggestion time is 24 hours.

5.回流焊接 Reflow Solder

不适合回流焊接 Not suitable for reflow soldering.

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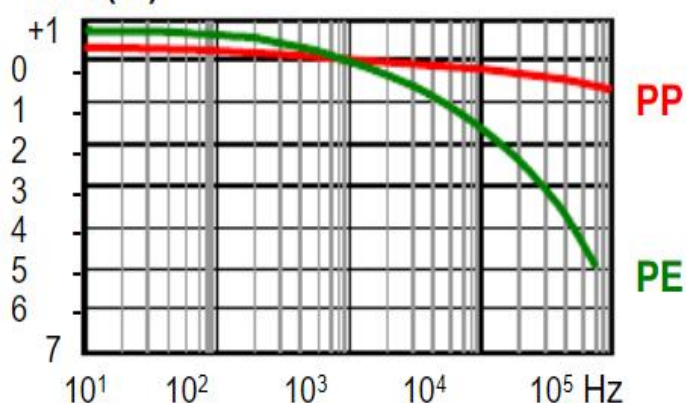
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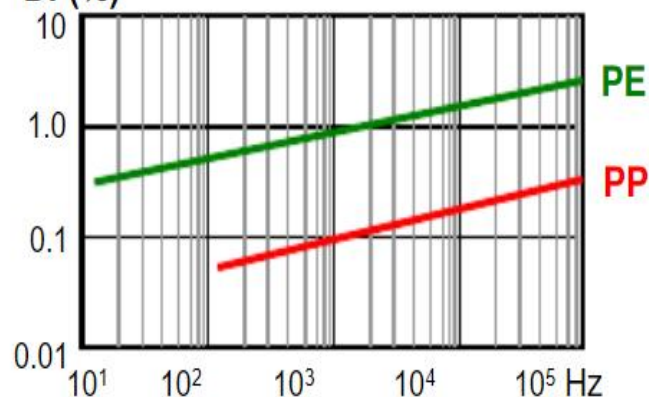
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14. 频率和温度曲线图 Frequency and temperature curves:

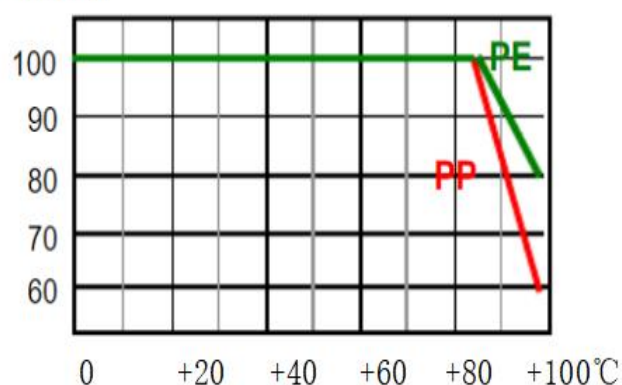
说明: MMKP82 系列谐振电容原材料属于聚丙烯: PP 类材料, 对应相应的材料线条走向即可

 $\Delta C/C(\%)$ 

DF(%)



Vn(%)



I.R.(MOhm)

