

盒式金属化聚丙烯膜抗干扰电容器

(MPX/X2 车规系列) 规格书

特点

- 满足 AEC-Q200-Rev E 质量标准
- 可通过 1000 次温度循环 (-55℃~+110℃)
- 符合 IEC 60384-14
- 高可靠性
- 符合 RoHS 2.0 环保要求
- 外壳、灌封胶符合 UL94 V-0 等级阻燃标准

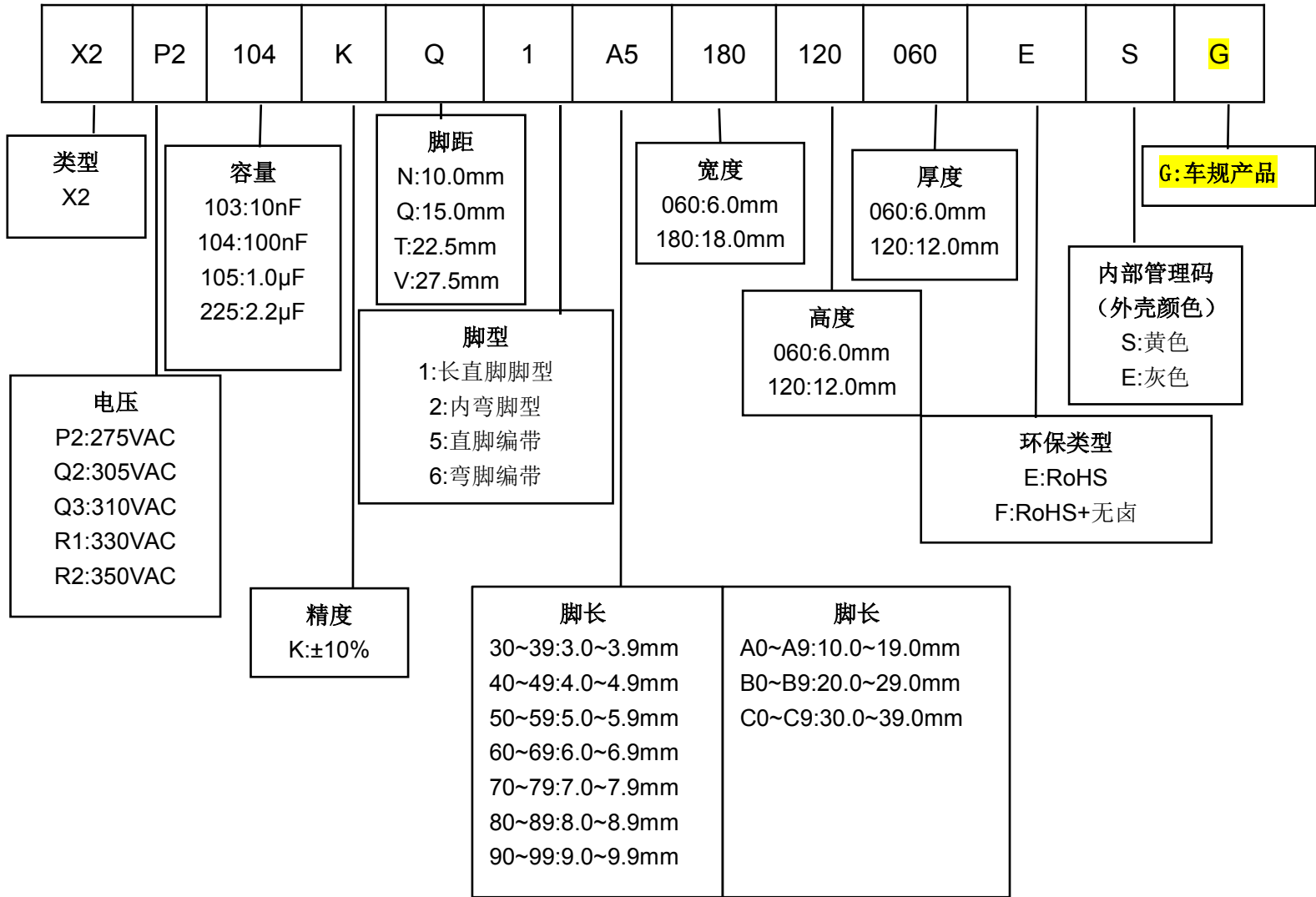
用途

- 主要用于各种电源跨接线路等抗干扰场合。

安规认证

国家	认证标志	标准号	证书号	容量范围	额定电压
美国/加拿大		UL60384-14	E208107	0.001 μF~10.0 μF	275VAC 305VAC 310VAC 330VAC 350VAC
德国		EN60384-14:2017	40034679	0.001 μF~10.0 μF	
欧盟		EN60384-14:2017	40034679	0.001 μF~10.0 μF	
中国		GB/T 6346.14-2023	CQC19001213200	0.001 μF~10.0 μF	
韩国		K60384	SU03031-12001C	0.1uF以下	
			SU03031-12002C	0.1uF以上~0.33uF	
			SU03031-12003D	0.33uF以上~1.0uF	
			SU03031-12004D	1.0uF以上~2.2uF	
			SU03031-23001	2.2uF以上~4.7uF	
			SU03031-23002	4.7uF以上~10.0uF	

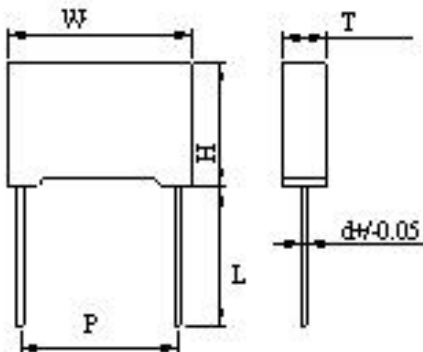
料号编码原则



技术要求

气候类别	40/110/56
额定电压	275VAC、305VAC、310VAC、330VAC、350VAC
损耗角正切	≤0.1%
耐电压	引脚与壳体之间: 2U _R +1500VAC 最小 2000VAC
	两引出端之间:4.3U _R (DC)/5S
绝缘电阻	C _R ≤0.33μF, IR≥15000MΩ C _R >0.33μF, IR≥5000S 注: T[s]=I.R.[MΩ]*CN [μF] 20℃、100V、60S

外形尺寸 (mm) 和安规认证



容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.001	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0012	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0015	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0018	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.002	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0022	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0025	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0027	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0033	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0039	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0047	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0056	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6

容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.0068	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.0082	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.01	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.012	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.015	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.018	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.022	275VAC/305VAC/310VAC	10	9	4	7.5	0.6
	330VAC/350VAC	10	11	5	7.5	0.6
0.033	275VAC/305VAC/310VAC	10	11.5	6	7.5	0.6
	330VAC/350VAC	10	15	8	7.5	0.6
0.001	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0012	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0015	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0018	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0022	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0033	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0039	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0047	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6

容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.0056	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0068	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.0082	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.01	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.012	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.015	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.018	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.02	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.022	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.027	275VAC/305VAC/310VAC	13	9	4	10	0.6
	330VAC/350VAC	13	11	5	10	0.6
0.033	275VAC/305VAC/310VAC 330VAC/350VAC	13	11	5	10	0.6
0.039	275VAC/305VAC/310VAC	13	11	5	10	0.6
	330VAC/350VAC	13	12	6	10	0.6
0.047	275VAC/305VAC/310VAC	13	11	5	10	0.6
	330VAC/350VAC	13	12	6	10	0.6
0.056	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	13	7	10	0.6
0.068	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	13	7	10	0.6
0.082	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	13	7	10	0.6

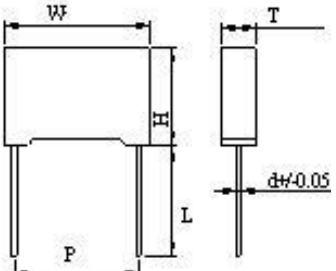
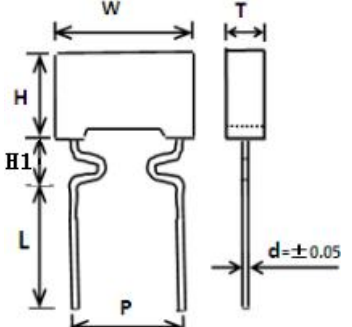
容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.1	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	13	7	10	0.6
0.12	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	13	7	10	0.6
0.15	275VAC/305VAC/310VAC	13	12	6	10	0.6
	330VAC/350VAC	13	15.5	8	10	0.6
0.15	275VAC/305VAC/310VAC	15	12.5	7	12.5	0.6
	330VAC/350VAC	15	15	9	12.5	0.6
0.18	275VAC/305VAC/310VAC	15	12.5	7	12.5	0.6
	330VAC/350VAC	15	15	9	12.5	0.6
0.22	275VAC/305VAC/310VAC	15	14	8.5	12.5	0.6
	330VAC/350VAC	15	15	9	12.5	0.6
0.01	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.012	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.015	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.018	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.022	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.033	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.047	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.056	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.068	275VAC/305VAC/310VAC	18	11	5	15	0.8
	330VAC/350VAC	18	12	6	15	0.8
0.082	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	12.5	6.5	15	0.8

容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.1	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	12.5	6.5	15	0.8
0.15	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	12.5	6.5	15	0.8
0.18	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	13.5	7.5	15	0.8
0.2	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	15	9	15	0.8
0.22	275VAC/305VAC/310VAC	18	12	6	15	0.8
	330VAC/350VAC	18	15	9	15	0.8
0.27	275VAC/305VAC/310VAC	18	13.5	7.5	15	0.8
	330VAC/350VAC	18	15	9	15	0.8
0.33	275VAC/305VAC/310VAC	18	14.5	8.5	15	0.8
	330VAC/350VAC	18	15	9	15	0.8
0.39	275VAC/305VAC/310VAC	18	16	10	15	0.8
	330VAC/350VAC	18	19	11	15	0.8
0.47	275VAC/305VAC/310VAC	18	16	10	15	0.8
	330VAC/350VAC	18	19	11	15	0.8
0.52	275VAC/305VAC/310VAC	18	16	10	15	0.8
	330VAC/350VAC	18	20	11	15	0.8
0.56	275VAC/305VAC/310VAC	18	16	10	15	0.8
	330VAC/350VAC	18	20	11	15	0.8
0.15	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	16	7	22.5	0.8
0.18	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	16	7	22.5	0.8
0.22	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	16	7	22.5	0.8
0.27	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	16	7	22.5	0.8
0.33	275VAC/305VAC/310VAC	26.5	16.5	7	22.5	0.8
	330VAC/350VAC	26.5	17	8	22.5	0.8
0.39	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	17	8.5	22.5	0.8
0.47	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	19	10	22.5	0.8

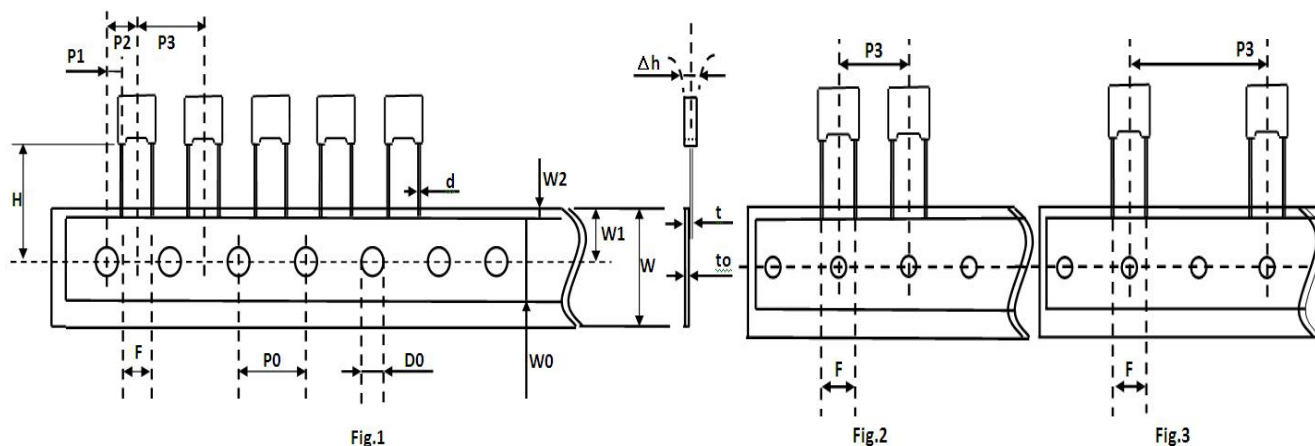
容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
0.52	275VAC/305VAC/310VAC	26.5	17	8.5	22.5	0.8
	330VAC/350VAC	26.5	18	9	22.5	0.8
0.56	275VAC/305VAC/310VAC	26.5	17	8.5	22.5	0.8
	330VAC/350VAC	26.5	18	9	22.5	0.8
0.68	275VAC/305VAC/310VAC	26.5	19	10	22.5	0.8
	330VAC/350VAC	26.5	20.5	11	22.5	0.8
0.82	275VAC/305VAC/310VAC 330VAC/350VAC	26.5	22	13	22.5	0.8
0.47	275VAC/305VAC/310VAC 330VAC/350VAC	31	20	11	27.5	0.8
0.52	275VAC/305VAC/310VAC 330VAC/350VAC	31	20	11	27.5	0.8
0.56	275VAC/305VAC/310VAC 330VAC/350VAC	31	20	11	27.5	0.8
0.68	275VAC/305VAC/310VAC 330VAC/350VAC	31	20	11	27.5	0.8
0.82	275VAC/305VAC/310VAC	31	21.5	12	27.5	0.8
	330VAC/350VAC	31	21	12	27.5	0.8
1	275VAC/305VAC/310VAC	31	21.5	12	27.5	0.8
	330VAC/350VAC	31	21	12	27.5	0.8
1.2	275VAC/305VAC/310VAC	31	22	13	27.5	0.8
	330VAC/350VAC	31	24	13	27.5	0.8
1.5	275VAC/305VAC/310VAC	31	22	13	27.5	0.8
	330VAC/350VAC	31	25	14	27.5	0.8
1.8	275VAC/305VAC/310VAC	31	22	13	27.5	0.8
	330VAC/350VAC	31	25.5	15	27.5	0.8
2	275VAC/305VAC/310VAC	31	22	13	27.5	0.8
	330VAC/350VAC	31	28	18	27.5	0.8
2.2	275VAC/305VAC/310VAC	31	25	14	27.5	0.8
	330VAC/350VAC	31	28	18	27.5	0.8
2.5	275VAC/305VAC/310VAC	32	25	14	27.5	0.8
	330VAC/350VAC	32	31	22	27.5	0.8
2.7	275VAC/305VAC/310VAC	32	25	15	27.5	0.8
	330VAC/350VAC	32	31	22	27.5	0.8
3	275VAC/305VAC/310VAC	31	25	15	27.5	0.8
	330VAC/350VAC	31	37	22	27.5	0.8

容量(uF)	电压	尺寸 (mm)				
		W±0.5	H±0.5	T±0.5	P±0.5	d±0.05
3.3	275VAC/305VAC/310VAC	31	25	15	27.5	0.8
	330VAC/350VAC	31	37	22	27.5	0.8
3.5	275VAC/305VAC/310VAC	32	28	18	27.5	0.8
3.9	275VAC/305VAC/310VAC	32	37	22	27.5	0.8
2	275VAC/305VAC/310VAC 330VAC/350VAC	41	28	14	37.5	1.0
2.2	275VAC/305VAC/310VAC 330VAC/350VAC	41	28	14	37.5	1.0
2.5	275VAC/305VAC/310VAC	41.5	28	14	37.5	1.0
	330VAC/350VAC	41.5	30	17	37.5	1.0
2.7	275VAC/305VAC/310VAC	41.5	28	14	37.5	1.0
	330VAC/350VAC	41.5	30	17	37.5	1.0
3	275VAC/305VAC/310VAC	41.5	28	14	37.5	1.0
	330VAC/350VAC	41.5	30	17	37.5	1.0
3.3	275VAC/305VAC/310VAC	41.5	28	14	37.5	1.0
	330VAC/350VAC	41.5	34	20.5	37.5	1.0
3.5	330VAC/350VAC	41.5	34	20.5	37.5	1.0
3.9	330VAC/350VAC	41.5	35.5	22.5	37.5	1.0
4.7	275VAC/305VAC/310VAC 330VAC/350VAC	41.5	35.5	22.5	37.5	1.0
5.6	275VAC/305VAC/310VAC 330VAC/350VAC	42.5	41	27.5	37.5	1.0
6.8	275VAC/305VAC/310VAC 330VAC/350VAC	42.5	41	27.5	37.5	1.0
8.2	275VAC/305VAC/310VAC 330VAC/350VAC	42.5	45	30	37.5	1.0
10	275VAC/305VAC/310VAC 330VAC/350VAC	42.5	50	35	37.5	1.0

脚型、脚长说明

脚型	图示	脚长 L (mm)	高度 H1 (mm)
长直脚脚型		$2.5 \leq L < 6.0: \pm 0.5$ $6.0 \leq L \leq 10: \pm 1.0$	/
内弯脚型		$2.5 \leq L < 6.0: \pm 0.5$ $6.0 \leq L \leq 10: \pm 1.0$	脚距 $P > 10\text{mm}$: $H1 < 6.0\text{mm}$ 脚距 $P \leq 10\text{mm}$: $H1 < 5.0\text{mm}$

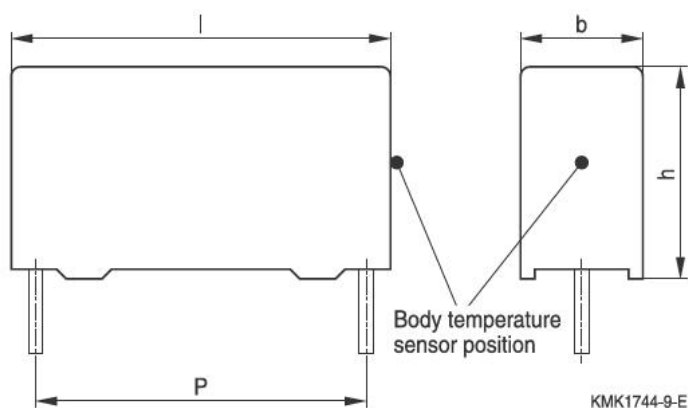
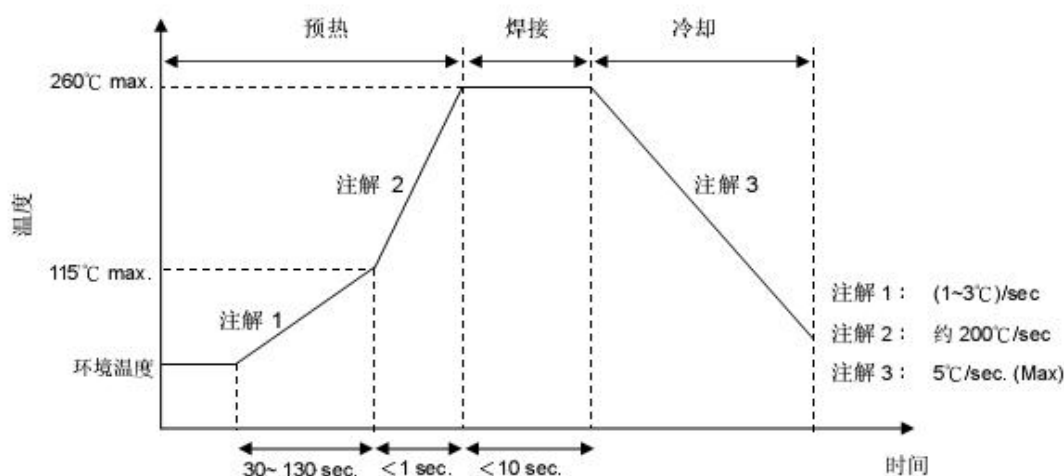
编带尺寸 (mm)



技术指标名称	代号	尺 寸(mm)					
		P=5	P=7.5	P=10	P=15	P=22.5	误差
编带类型		Fig. 1	Fig. 2	Fig. 2	Fig. 3		
电容器间距	P3	12.7	12.7	15.0	25.4	30.0	±1.0
产品本体对输送孔的偏移	P2	6.35	/	/	/	/	±1.3
输送孔间距	P0	12.7	12.7	15.0	12.7	12.7	±0.2
引线对输送孔的偏移	P1	3.85	/	/	/	/	±0.7
引脚间距	F	5	7.5	10.0	15.0	22.5	±0.5
本体底部至输送孔中心距离	H	20.0	20.0	20.0	20.0	20.0	±1.0
本体侧面倾斜	△h	0	0	0	0	0	±2.0
纸带宽度	W	18.0	18.0	18.0	18.0	18.0	+1.0-0.5
胶带纸宽度	W0	10.5	10.5	10.5	10.5	10.5	max
输送孔位置	W1	9.0	9.0	9.0	9.0	9.0	±0.5
胶带纸位置	W2	1.5	1.5	1.5	1.5	≤3	max
输送孔直径	D0	4.0	4.0	4.0	4.0	4.0	±0.3
引脚直径	d	0.5	0.6	0.6	0.8	0.8	±0.05
纸带厚度	t0	0.5	0.5	0.5	0.5	0.5	±0.2
编带总厚度	t	1.0	1.1	1.1	1.4	1.4	±0.2

焊接条件

波峰焊曲线



PP:
 During pre-heating: $T_p \leq 110^\circ\text{C}$
 During soldering: $T_s \leq 120^\circ\text{C}$, $t_s \leq 15\text{ s}$
 PE:
 During pre-heating: $T_p \leq 125^\circ\text{C}$
 During soldering: $T_s \leq 160^\circ\text{C}$, $t_s \leq 15\text{ s}$

烙铁重工焊接条件

项目	条件
烙铁头部温度	350°C (max.)
焊接时间	3 sec (max.)
焊接位置与涂装层距离	2 mm (min.)

注：薄膜电容器不适合回流焊焊接，否则产品会因热收缩导致性能问题。

储存环境要求

■ 由于大气中存在氯化物、硫化物、硫酸物质等，所以产品储存在大气中，必须注意引出端的可焊性变差。

■ 产品不能暴露在高温和高湿状态，请在不拆开原包装的基础上，在下面环境中储存。

A、温度： $\leq 35^\circ\text{C}$

B、湿度： $\leq 70\%\text{RH}$

C、保存时间：不超过 12 个月