

聚丙烯薄膜电容器

MKP Metallized Polypropylene Film Capacitors

MKPC

产品特点

- ◆ 耐脉冲能力强
- ◆ 具有优秀的自愈性
- ◆ 优异的阻燃性能
- ◆ 优秀的可靠性
- ◆ 使用寿命长
- ◆ 符合ROHS标准

产品用途

- ◆ 电子镇流器
- ◆ 缓冲吸收
- ◆ 开关电源

产品结构

- ◆ 电介质: 聚丙烯 (MKP)
- ◆ PBT塑料外壳 (UL 94 V-0)
- ◆ 环氧树脂密封 (UL 94 V-0)

引出

- ◆ 平行引线, 无铅镀锡
- ◆ 2引线
- ◆ 标准引线长度: 5 ± 0.5 mm

Features

- ◆ High pulse intensity
- ◆ Good self-healing properties
- ◆ Excellent flame retardant ability
- ◆ High reliability
- ◆ Long useful life
- ◆ RoHS-compatible

Applications

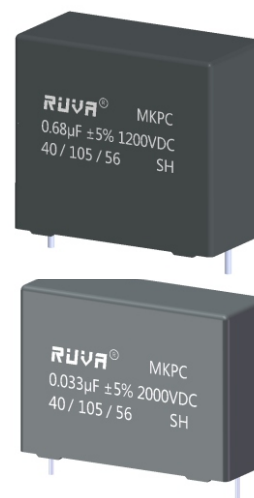
- ◆ Electronic ballasts
- ◆ Snubbing
- ◆ Switch-mode power supplies

Construction

- ◆ Dielectric: Polypropylene (MKP)
- ◆ PBT Plastic case (UL 94 V-0)
- ◆ Epoxy resin sealing (UL 94 V-0)

Terminals

- ◆ Parallel wire leads, lead-free tinned
- ◆ 2-pins
- ◆ Standard lead lengths: 5 ± 1 mm



技术参数 Technical Parameter

参考标准 Reference standard GB/T10190、IEC 60384-16

气候类别 Climatic category 40/105/56

工作温度范围
Operating temperature range $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$

电容量范围 Capacitance Range $0.0033 \mu\text{F} \sim 6.8 \mu\text{F}$

电容量偏差 Capacitance tolerance $\pm 2\%(\text{G})$ 、 $\pm 3\%(\text{H})$ 、 $\pm 5\%(\text{J})$ 、 $\pm 10\%(\text{K})$ 、 $\pm 20\%(\text{M})$

耐久性
Endurance test $85 \pm 3^{\circ}\text{C}$, 1.25VR, 1000h

性能要求
Performance requirements
容量变化 $|\Delta C/C| \leq 5\%$
Capacitance change $|\Delta C/C| \leq 5\%$
损耗变化 $\Delta \tan \leq 0.004$ (at 10 kHz)
Dissipation factor change $\Delta \tan \leq 0.004$ (at 10 kHz)
绝缘电阻 $R_{\text{ins}} \geq 50\%$ 规定值
Insulation resistance $R_{\text{ins}} \geq 50\%$ of initial limit

耐湿负荷测试
Biased humidity test $60 \pm 3^{\circ}\text{C}$, 95 $\pm 3\%$ RH, VR, 1000h

性能要求
Performance requirements
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Capacitance change $|\Delta C/C| \leq 5\%$
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绝缘电阻 $R_{\text{ins}} \geq 50\%$ 规定值
Insulation resistance $R_{\text{ins}} \geq 50\%$ of initial limit

额定电压 Rated voltage (VR) 250Vdc(160Vac), 400Vdc(200Vac), 630Vdc(250Vac), 1000Vdc(250Vac), 1250Vdc(500Vac), 1600Vdc(500Vac), 2000Vdc(700Vac)

损耗角正切 Dissipation Factor $\text{tg } \delta \leq 0.0010$ (1kHz, 20°C)

绝缘电阻
Insulation Resistance $C_R \leq 0.33 \mu\text{F}$, $I_R \geq 1000000 \Omega$
 $C_R > 0.33 \mu\text{F}$, $R_C \geq 300000 \text{s}$ (20°C , 100V, 1min)

耐电压 Withstand Voltage $1.6U_R$, 5s

在 85°C 到 105°C 之间电压降低率
For temperatures between 85°C and 105°C $1.33\%/^{\circ}\text{C}$ of V_{op} derating compared to V_{op} at 85°C

电压爬升率 Dv/dt values ($\text{V}/\mu\text{s}$)

U_R (V)	P15	P22.5	P27.5
250	200	120	50
400	300	180	100
630	400	300	150
1000	975	600	300
1250	1850	1150	500
1600	4500	2400	1000
2000	8000	7000	2300

常用规格表
Common Specification

CN (μ F)	W	H	T	P	d	Part number
250Vdc(160Vac)						
1.00	26.5	18.5	10.0	22.5	0.8	MKPC105D0250Z22***
1.20	26.5	18.5	10.0	22.5	0.8	MKPC125D0250Z22***
1.50	26.5	20.0	11.0	22.5	0.8	MKPC155D0250Z22***
2.20	26.5	24.5	15.5	22.5	0.8	MKPC225D0250Z22***
1.50	32.0	20.0	11.0	27.5	0.8	MKPC155D0250Z27***
2.20	32.0	22.0	13.0	27.5	0.8	MKPC225D0250Z27***
3.30	32.0	25.0	13.0	27.5	0.8	MKPC335D0250Z27***
4.70	32.0	28.0	17.0	27.5	1.0	MKPC475D0250H27**
5.60	32.0	33.0	18.0	27.5	1.0	MKPC565D0250H27**
6.80	32.0	33.0	18.0	27.5	1.0	MKPC685D0250H27**
1000Vdc(250Vac)						
0.100	26.5	17.0	8.5	22.5	0.8	MKPC104D1000Z22**
0.220	26.5	18.5	10.0	22.5	0.8	MKPC224D1000Z22**
0.330	26.5	24.5	15.5	22.5	0.8	MKPC334D1000Z22**
0.560	26.5	29.5	14.5	22.5	0.8	MKPC564D1000Z22**
0.330	32.0	20.0	11.0	27.5	0.8	MKPC334D1000Z27**
0.470	32.0	24.5	15.0	27.5	0.8	MKPC474D1000Z27**
0.560	32.0	28.0	14.0	27.5	0.8	MKPC564D1000Z27**
1250Vdc(500Vac)						
0.010	18.0	12.0	6.0	15	0.8	MKPC103D1250Z15***
0.015	18.0	13.5	7.5	15	0.8	MKPC153D1250Z15***
0.022	18.0	14.5	8.5	15	0.8	MKPC223D1250Z15***
0.033	18.0	16.0	10.0	15	0.8	MKPC333D1250Z15***
0.047	18.0	19.0	11.0	15	0.8	MKPC473D1250Z15***
0.100	26.5	20.0	11.0	22.5	0.8	MKPC104D1250Z22***
0.150	26.5	24.5	15.0	22.5	0.8	MKPC334D0630Z15***
0.220	26.5	29.5	14.5	22.5	0.8	MKPC224D0630Z22***
0.100	32.0	18.0	9.0	27.5	0.8	MKPC334D0630Z22***
0.150	32.0	20.0	11.0	27.5	0.8	MKPC474D0630Z22***
0.220	32.0	25.0	13.0	27.5	0.8	MKPC684D0630Z22***
0.330	32.0	28.0	14.0	27.5	0.8	MKPC105D0630Z22***
0.470	32.0	33.0	18.0	27.5	1.0	MKPC684D0630Z27***
1600Vdc(500Vac)						
0.0220	26.5	16.0	7.0	22.5	0.8	MKPC103D1600Z22*
0.0330	26.5	17.0	8.5	22.5	0.8	MKPC103D1600Z22*
0.0470	26.5	20.0	11.0	22.5	0.8	MKPC103D1600Z22*
0.0560	26.5	22.0	12.0	22.5	0.8	MKPC103D1600Z22*
0.1000	26.5	24.5	15.0	22.5	0.8	MKPC103D1600Z22*
0.0470	32.0	18.0	9.0	27.5	0.8	MKPC103D1600Z27*
0.0680	32.0	20.0	11.0	27.5	0.8	MKPC103D1600Z27*
0.1000	32.0	24.5	15.0	27.5	0.8	MKPC103D1600Z27*
0.1500	32.0	28.0	17.0	27.5	1.0	MKPC103D1600H27*
2000Vdc(700Vac)						
0.0033	18.0	14.5	8.5	15	0.8	MKPC104D1000Z15**
0.0047	26.5	15.0	6.0	22.5	0.8	MKPC564D1000Z22**
0.0068	26.5	16.0	7.0	22.5	0.8	MKPC334D1000Z27**
0.0100	26.5	17.0	8.5	22.5	0.8	MKPC474D1000Z27**
0.0150	26.5	18.5	10.0	22.5	0.8	MKPC564D1000Z27**
0.0220	26.5	20.0	11.0	22.5	1.0	MKPC684D1000Z27**
0.0330	26.5	24.5	15.0	22.5	1.0	MKPC105D1000Z27**
0.0220	31.5	20.0	11.0	27.5	1.0	MKPC155D1000Z27**
0.0330	32.0	22.0	13.0	27.5	1.0	MKPC105D1000Z27**
0.0470	31.5	25.0	13.0	27.5	0.8	MKPC103D1250Z15***
0.0680	32.0	28.0	14.0	27.5	0.8	MKPC153D1250Z15***

备注REMARKS:

1. “+ -” 意味着容忍能力能够符合 “J” “K”
2. “000” 意味着内部用铅长度
3. 电容值测量1 kHz
1. “+ -” Means the capacity tolerance can conform to "J" "K"
2. "000" Means Internal use the lead length
3. Capacitance value measured at 1 kHz