

X2抑制干扰型薄膜电容器

MKP X2 Metallized Polypropylene Film Capacitors Suppression Capacitor)

MKPX

产品特点

- ◆ 高压产品，紧凑
- ◆ 良好的自我修复性能
- ◆ 优秀的阻燃能力
- ◆ 高可靠性
- ◆ 使用寿命长
- ◆ 符合ROHS标准

产品用途

- ◆ 用于跨线干扰抑制电路

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，4引线版本
- ◆ 标准引线长度：5 ± 0.5 mm

Features

- ◆ High voltage product, compact
- ◆ Good self-healing properties
- ◆ Excellent flame retardant ability
- ◆ High reliability
- ◆ Long useful life
- ◆ RoHS-compatible

Applications

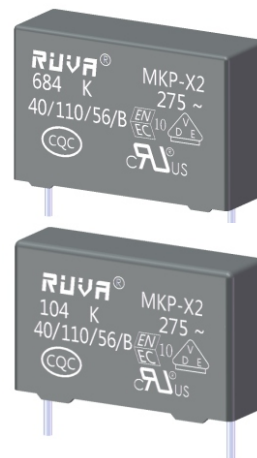
- ◆ Used in across-the-line interference suppression circuit

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, 4-pins, versions
- ◆ Standard lead lengths: 5 ± 1 mm



安全认证 Safety Approval

	CQC (中国)	GB/T 6346.14-2015 275Vac/305Vac/310Vac/315Vac/330Vac, X2, 0.0047 μF~22.0 μF 40/110/56/B, 40/85/56/B, 40/105/56/B Certificate No.: CQC18001198436
	UL/CUL (美国/加拿大)	MKP-X2, 275Vac/305Vac/310Vac, X2, 0.0047 μF~22.0 μF, 40/110/56/B Certificate No.: E502152
	ENEC-UL (美国)	IEC 60384-14, 275Vac/305Vac/310Vac, X2, 0.0047 μF~22.0 μF, 40/110/56/B Certificate No.: 40049912

技术参数 Technical Parameter

参考标准 Reference standard	IEC 60384-14、GB/T 6346.14-2015 UL 60384-14
气候类别/阻燃等级 Climatic category/Flammability retardant Class	40/105/56/B
工作温度范围 Operating temperature range	-40°C~110°C
电容量范围 Capacitance Range	0.0047 μF~22.0 μF
电容量偏差 Capacitance tolerance	±5%(J)、±10%(K)、 ±20%(M)(20°C, 1kHz)
额定电压 Rated voltage (VR)	275Vac/305Vac 310Vac/315Vac/330Vac
损耗角正切 Dissipation Factor	C < 0.47 μF tg δ ≤ 0.0010(1kHz) tg δ ≤ 0.0020(10kHz) 0.47 μF ≤ C ≤ 1.0 μF tg δ ≤ 0.0020(1kHz) tg δ ≤ 0.0040(10kHz) 1.0 μF < C ≤ 10 μF tg δ ≤ 0.0030(1kHz) tg δ ≤ 0.0040(1kHz) C > 10 μF tg δ ≤ 0.0040(1kHz)
绝缘电阻 Insulation Resistance	C _R ≤ 0.33 μF, I _R ≥ 45 000 MΩ C _R > 0.33 μF, τ ≥ 15000s (20°C, 100V, 1min)

耐电压 Withstand Voltage

引线之间 4.3U_R, 2s
Between Terminals
极壳之间 2120Vac, 50Hz (1min)
Between Terminals to case

耐久性 Endurance test

1000h, 1.25VR, increase the voltage to
1000VAC every 1h for a duration of 0.1s,
Upper limit temperature

性能要求 Performance requirements

容量变化 |ΔC/C| ≤ 10%
Capacitance change |ΔC/C| ≤ 10%
损耗变化 Δtan ≤ 0.008 (at 10 kHz)
Dissipation factor change Δtan ≤ 0.008 (at 10 kHz)
绝缘电阻 R_{ins} ≥ 50%规定值
Insulation resistance R_{ins} ≥ 50% of initial limit

稳态湿热 Damp heat steady state

40 ± 2° C, 93 ± 3%RH, 56days

性能要求 Performance requirements

容量变化 |ΔC/C| ≤ 5%
Capacitance change |ΔC/C| ≤ 5%
损耗变化 Δtan ≤ 0.008 (at 10 kHz)
Dissipation factor change Δtan ≤ 0.008 (at 10 kHz)
绝缘电阻 R_{ins} ≥ 50%规定值
Insulation resistance R_{ins} ≥ 50% of initial limit

常用规格表
Common Specification

C (uF)	W ±0.5	H ±0.5	T ±0.5	P ±0.5	d	Part number
0.33	18.0	14.5	8.5	15.0	-	MKPX334P0310Z15+-000
0.39	18.0	14.5	8.5	15.0	-	MKPX394P0310Z15+-000
0.47	18.0	16.0	10.0	15.0	-	MKPX474P0310Z15+-000
0.56	26.5	16.0	7.0	22.5	0.8	MKPX564P0310Z22+-000
0.68	26.5	17.0	8.5	22.5	0.8	MKPX684P0310Z22+-000
0.82	26.5	18.5	10.0	22.5	0.8	MKPX824P0310Z22+-000
1.0	26.5	18.5	10.0	22.5	0.8	MKPX105P0310Z22+-000
1.2	26.5	20.0	11.0	22.5	0.8	MKPX125P0310Z22+-000
1.5	26.5	22.0	12.0	22.5	0.8	MKPX155P0310Z22+-000
1.8	26.5	24.5	15.5	22.5	0.8	MKPX185P0310Z22+-000
2.2	26.5	24.5	15.5	22.5	0.8	MKPX225P0310Z22+-000
0.33	32.0	18.0	9.0	27.5	0.8	MKPX334P0310Z27+-000
0.39	32.0	18.0	9.0	27.5	0.8	MKPX394P0310Z27+-000
0.47	32.0	18.0	9.0	27.5	0.8	MKPX474P0310Z27+-000
0.56	32.0	18.0	9.0	27.5	0.8	MKPX564P0310Z27+-000
0.68	32.0	18.0	9.0	27.5	0.8	MKPX684P0310Z27+-000
0.82	32.0	18.0	9.0	27.5	0.8	MKPX824P0310Z27+-000
1.0	32.0	18.0	9.0	27.5	0.8	MKPX105P0310Z27+-000
1.2	32.0	20.0	11.0	27.5	0.8	MKPX125P0310Z27+-000
1.5	32.0	20.0	11.0	27.5	0.8	MKPX155P0310Z27+-000
1.8	32.0	22.0	13.0	27.5	0.8	MKPX185P0310Z27+-000
2.2	32.0	25.0	13.0	27.5	0.8	MKPX225P0310Z27+-000
2.7	32.0	28.0	14.0	27.5	0.8	MKPX275P0310Z27+-000
3.3	32.0	28.0	17.0	27.5	0.8	MKPX335P0310Z27+-000
3.9	32.0	33.0	18.0	27.5	0.8	MKPX395P0310Z27+-000
4.7	32.0	33.0	18.0	27.5	0.8	MKPX475P0310Z27+-000
5.6	32.0	37.0	22.0	27.5	0.8	MKPX565P0310Z27+-000
6.8	32.0	37.0	22.0	27.5	0.8	MKPX685P0310Z27+-000
1.5	41.0	22.0	11.0	37.5	1.0	MKPX155P0310H37+-000
1.8	41.0	22.0	11.0	37.5	1.0	MKPX185P0310H37+-000
2.2	41.0	24.0	13.0	37.5	1.0	MKPX225P0310H37+-000
2.7	41.0	24.0	13.0	37.5	1.0	MKPX275P0310H37+-000
3.3	41.0	26.0	15.0	37.5	1.0	MKPX335P0310H37+-000
3.3	42.0	28.0	14.0	37.5	1.0	MKPX335P0310H37+-000
3.9	42.0	28.0	14.0	37.5	1.0	MKPX395P0310H37+-000
4.7	41.0	30.0	16.0	37.5	1.0	MKPX475P0310H37+-000
5.6	41.0	33.5	18.5	37.5	1.0	MKPX565P0310H37+-000
6.8	41.0	33.5	18.5	37.5	1.0	MKPX685P0310H37+-000
8.2	41.0	37.0	22.0	37.5	1.0	MKPX825P0310H37+-000
10.0	41.0	41.0	26.0	37.5	1.0	MKPX106P0310H37+-000
12.0	41.0	41.0	26.0	37.5	1.0	MKPX126P0310H37+-000
15.0	42.0	45.0	30.0	37.5	1.0	MKPX156P0310H37+-000
18.0	42.0	50.0	35.0	37.5	1.0	MKPX186P0310H37+-000
20.0	57.0	45.0	30.0	52.5	1.2	MKPX206P0310E52+-000
22.0	57.0	50.0	35.0	52.5	1.2	MKPX226P0310E52+-000

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