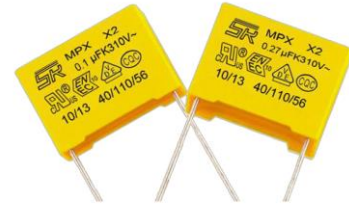




**EN:** This Datasheet/Document is presented by the manufacturer.

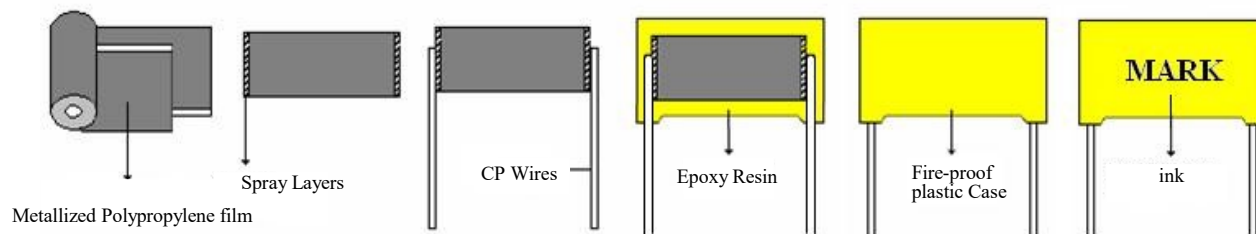
Please visit our website for pricing and availability at [www.hestore.hu](http://www.hestore.hu).

## MKP-X2 Metallized Polypropylene Film Capacitor, Class Type:X2-MPX



Product image

| Type               | Cap (μF) | Rated Voltage | Capacitance Tolerance | (mm) Dimensions (mm) |       |       |       |      |     |
|--------------------|----------|---------------|-----------------------|----------------------|-------|-------|-------|------|-----|
|                    |          |               |                       | W±0.5                | H±0.5 | T±0.5 | P±0.5 | Lmin | Φd  |
| MKP-X2-10NR10/310  | 0.01uF   | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-22NR10/310  | 0.022uF  | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-33NR10/310  | 0.033uF  | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-47NR10/310  | 0.047uF  | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-68NR10/310  | 0.068uF  | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-100NR10/310 | 0.1uF    | 310VAC        | K                     | 13                   | 11    | 5     | 10    | 20   | 0.6 |
| MKP-X2-100NR15/310 | 0.1uF    | 310VAC        | K                     | 18                   | 12    | 6     | 15    | 20   | 0.6 |
| MKP-X2-150NR10/310 | 0.15uF   | 310VAC        | K                     | 13                   | 12    | 6     | 10    | 20   | 0.6 |
| MKP-X2-150NR15/310 | 0.15uF   | 310VAC        | K                     | 18                   | 13.5  | 7.5   | 15    | 20   | 0.6 |
| MKP-X2-220NR10/310 | 0.22uF   | 310VAC        | K                     | 13                   | 12    | 6     | 10    | 20   | 0.6 |
| MKP-X2-220NR15/310 | 0.22uF   | 310VAC        | K                     | 18                   | 12    | 6     | 15    | 20   | 0.6 |
| MKP-X2-330NR15/310 | 0.33uF   | 310VAC        | K                     | 18                   | 14.5  | 8.5   | 15    | 20   | 0.6 |
| MKP-X2-330NR22/310 | 0.33uF   | 310VAC        | K                     | 26.5                 | 16.5  | 7     | 22.5  | 20   | 0.6 |
| MKP-X2-470NR15/310 | 0.47uF   | 310VAC        | K                     | 18                   | 14.5  | 8.5   | 15    | 20   | 0.6 |
| MKP-X2-470NR22/310 | 0.47uF   | 310VAC        | K                     | 26.5                 | 16.5  | 7     | 22.5  | 20   | 0.6 |
| MKP-X2-560NR15/310 | 0.56uF   | 310VAC        | K                     | 18                   | 16    | 10    | 15    | 20   | 0.6 |
| MKP-X2-1UR22/310   | 1.0uF    | 310VAC        | K                     | 26.3                 | 19    | 10    | 22.5  | 20   | 0.6 |
| MKP-X2-2UR27/310   | 2.0uF    | 310VAC        | K                     | 31.5                 | 21.6  | 13    | 27.5  | 20   | 0.6 |
| MKP-X2-3U3R27/310  | 3.3uF    | 310VAC        | K                     | 31.5                 | 31    | 22    | 27.5  | 20   | 0.6 |
| MKP-X2-4U7R27/310  | 4.7uF    | 310VAC        | K                     | 31                   | 31    | 22    | 27.5  | 20   | 0.6 |
| MKP-X2-1U5R22/310  | 1.5uF    | 310VAC        | K                     | 26.3                 | 21.5  | 12    | 22.5  | 20   | 0.6 |
| MKP-X2-1U5R27/310  | 1.5uF    | 310VAC        | K                     | 31.5                 | 19.5  | 10.8  | 27.5  | 20   | 0.6 |
| MKP-X2-2U2R22/310  | 2.2uF    | 310VAC        | K                     | 26.3                 | 21.6  | 12    | 22.5  | 20   | 0.6 |
| MKP-X2-2U2R27/310  | 2.2uF    | 310VAC        | K                     | 31.5                 | 21.6  | 13    | 27.5  | 20   | 0.6 |



### Safety Approvals



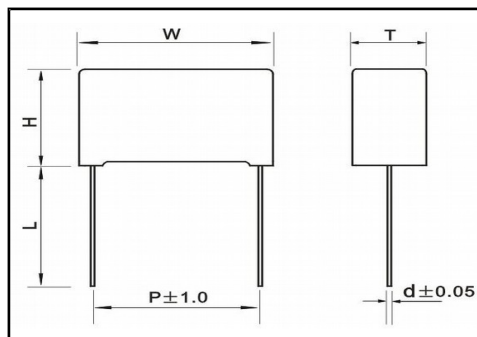
### Specification :

|                                              |                                                                                                                     |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Reference Standards:                         | GB14472-2005(China)IEC60384-1 (International)<br>EN132400,EN60384-14,IEC60384-14                                    |
| Rated Voltage( $U_R$ ):                      | 310VAC                                                                                                              |
| Operation Temperature Range:                 | -40℃ — +110℃                                                                                                        |
| Capacitance Range :                          | 0.0047μF — 4.7μF                                                                                                    |
| Capacitance Tolerance Range :                | K(±10%)                                                                                                             |
| Dielectric :                                 | Polypropylene Film                                                                                                  |
| Dissipation Factor Tanδ : ( 25℃±5℃ )         | ≤0.15% ( CR ≤ 1μF )    ≤0.3% ( CR > 1μF )<br>( 25℃±5℃,10KHz )                                                       |
| Insulation Resistance:<br>Between Terminals: | 100VDC , 1Min ( 20±5℃ ) C≤0.33μF    ≥30000MΩ<br>C > 0.33μF    ≥10000 MΩ·S                                           |
| Withstand Voltage:                           | Between Terminals CR≤1.0μF 1800VDC(2S)<br>CR > 1.0μF 4.3U <sub>R</sub> VDC(2S)<br>Between Terminals to Case 2100VAC |
| Life. Test Conditions:                       | 100±2℃ , 1.25U <sub>R</sub> , 1,000Hours<br>Capacitance Drift: ≤±3%<br>Of the initial value ≤0.06%                  |

## Metallized Polypropylene Film Capacitor, Class Type:X2-MPX

Are non-inductively wound with metallized polypropylene film as dielectric/electrode with copper-clad steel leads and encapsulated in a plastic case sealed with epoxy resin.

### Outline Drawing :



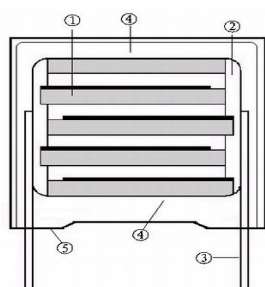
### ◆ Features :

- Box type provides the identical outer appearance.
- Withstanding overvoltage stressing.
- Excellent active and passive flame resistant abilities.
- Withstanding 2.5KV impulse voltage, Class X2.

### ◆ Typical Applications :

- As an across-the-line type noise suppression capacitor, and suitable
- Grid power supply of electronic instruments and electronic equipment, switch, contacts produces a spark discharge sites.
- Electric tools, lighting, hair dryers, water heaters and other household electrical appliances

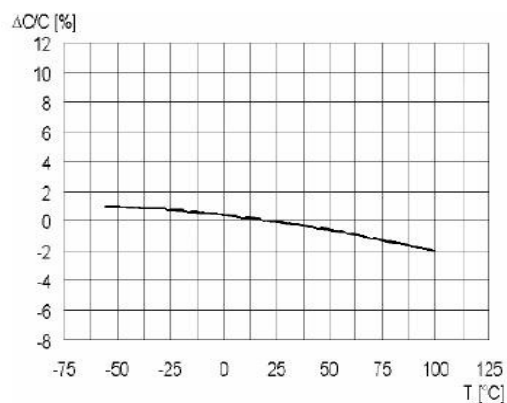
### structure chart :



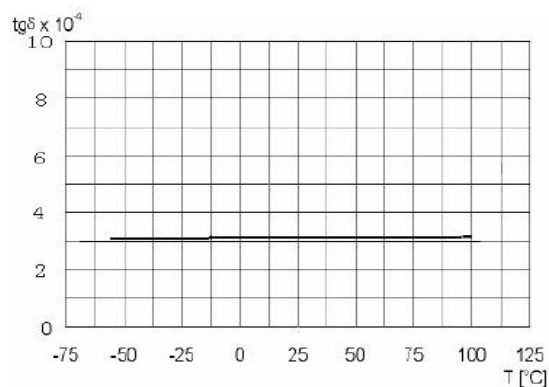
- ① Metallized Polypropylene film
- ② Spray Layers
- ③ CP Wires
- ④ Epoxy Resin
- ⑤ Fire-proof plastic Case

Dissipation Factor  $\leq 0.06\%$  Of increased value

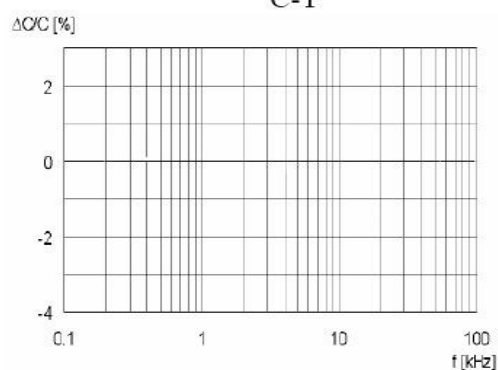
Polypropylene film capacitor characteristic curve:



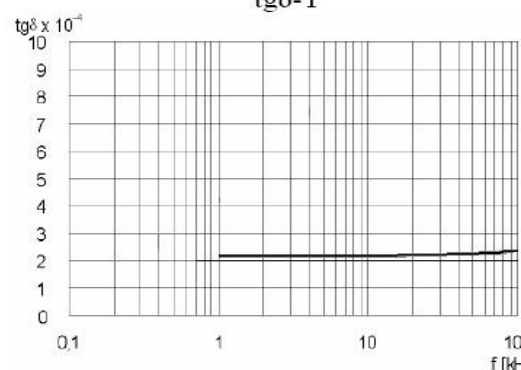
C-T



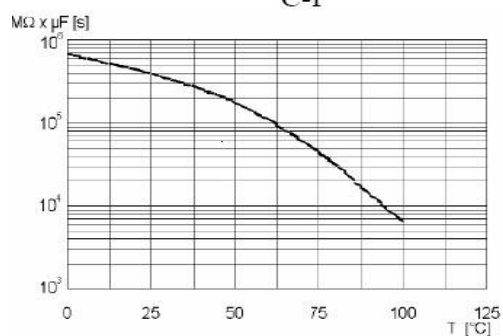
tgδ-T



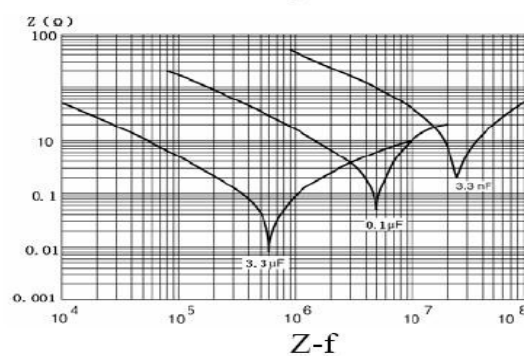
C-f



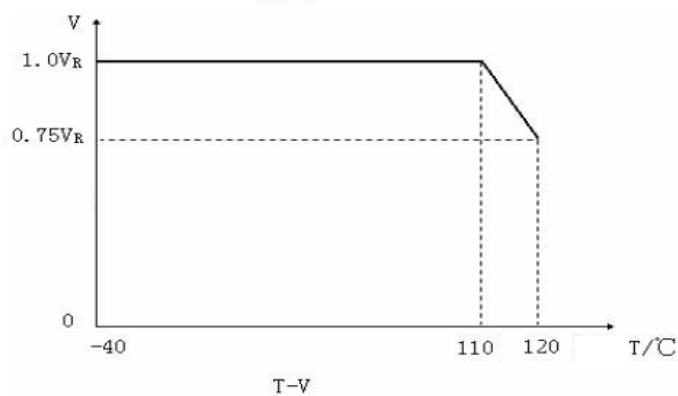
tgδ-f



R-T



Z-f



T-V