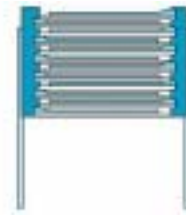







# Interference Suppression Capacitor

MKP-X2

THB-Version- Temperature Humidity Bias



-  Metallized Polypropylene Film
-  Metal spray layer
-  Connecting wire

## Construction:

- Dielectric : Polypropylene Film.
- Electrodes : Zinc Metallization.
- Winding : non-inductive type.
- Leads : Tinned wire.
- Outer coating : Flame retarding plastic case and epoxy filled.

## Feature:

Excellent longterm-stability under tough environmental conditions - such as high ambient temperatures and high humidity  
 Self-healing properties.  
 In accordance with UL , CUL , ENEC , CQC safety regulations  
 Class X2

## Recommended Application:

- All applications with high demand on excellent longterm-stability, such as:
- Power Meters
  - Capacitive Power Supply applications
  - Outdoor applications
  - For severe ambient conditions
  - For connection in series with the mains
  - Across the lin
  - EMI filter

## Electrical Characteristics:

Related Documents	IEC 60384-14 , UL 1414 , UL 1283 , CQC				
Rated Voltage	305VAC (ENEC , CQC) , 310VAC (UL , CUL).				
Rated Temperature	-40°C ~ +110°C				
Capacitance Range	0.047μF ~ 10.0μF.				
Dissipation Factor	0.1% or less. at 1Khz , 20± 5°C				
Insulation Resistance	Terminal to Terminal: ≥15000MΩ at DC 100V ( C≤ 0.33μF) ≥ 5000MΩ× μF at DC 100V (C>0.33μF)		Terminal to Enclosure: ≥30000MΩ at DC 100V ≥500MΩ at DC 500V		
Withstand Voltage	<p>[Between terminal] :</p> <p>Nothing abnormal shall be found when apply a voltage specified below for 1 minute  <math>C \leq 0.0068\mu F</math>: AC 1500V or DC 2121V , <math>C &gt; 0.0068\mu F</math>: AC 1000V or DC 1768V.            Cut-off Current AC : 2A , DC : 10mA</p> <p>1. Above test must connected with a current limiting resistance of 1 Ω / Voltage.            2. Slow-up voltage speed : 100V/sec.</p> <p>[Between terminal and enclosure] :</p> <p>Nothing abnormal shall be found when apply a voltage of 2050Vac for 1 minute.</p>				
Rated Voltage	Pitch	15m/m	22.5m/m	27.5m/m	37.5m/m
Pulse Slope dV/dt (V/μs) at 630VDC	$V_R$	300	180	120	100
Climate Category	<p>code letter G and number 40 = Minimum limit temperature.... -40°C.            code letter M and number 110 = Maximum limit temperature.... +110°C.            code letter F and number 56 = Maximum limit of Relative Humidity            The days of damp heat test..... 56 days.            code letter B = Category of Passive flammability.</p>				






# Interference Suppression Capacitor

Reliability Test:

Test Method	Requirements
Temperature: 85 Relative humidity: 85% Voltage applied: 240 VAC Duration: 1000 hours	Capacitance change C/C : 10% DF change $\Delta \tan \delta$ 1.0% at 1Khz Insulation Resistance: 50% of spec value

## SAFETY APPROVALS :

LOGO MARK	COUNTRY	APPROVAL STANDARD	APPROVAL NO.	CLASS	CAP. RANGE	RATED VOLTAGE
UL CUL  US	U.S.A CANADA	UL-1414 UL-1283	E149075 E221690	FOWX2 FOKY2	0.0047 $\mu$ F ~ 1.0 $\mu$ F 0.0047 $\mu$ F ~ 10 $\mu$ F	250VAC 310VAC
CB TEST	EUROPE	IEC-60384-14 SECOND EDITION	SE-66904	X2	0.0047 $\mu$ F ~ 10 $\mu$ F	305VAC
ENEC 	EUROPE	EN-132400 IEC-60384-14 SECOND EDITION	SE/0252-5B	X2	0.0047 $\mu$ F ~ 10 $\mu$ F 40/110/56/B	305VAC
CQC 	CHINA	GB/T14472 (1998)	CQC11001064918	X2	0.0047 $\mu$ F ~ 10 $\mu$ F	305VAC

Cap. ( $\mu$ F)

Size unit: m/m

Cap \ Size	W	H	T	P	d $\phi$
0.047	18	12	6	15	0.8
0.068	18	13	7	15	0.8
0.1	18	13.5	7.5	15	0.8
0.15	18	13.5	7.5	15	0.8
0.22	18	15	9	15	0.8
0.33	18	18	10	15	0.8
0.47	18	19	12.5	15	0.8
0.15	26	14.5	6	22.5	0.8
0.22	26	15	7.5	22.5	0.8
0.33	26	17	8	22.5	0.8
0.47	26	19	10	22.5	0.8
0.56	26	20	10	22.5	0.8
0.68	26	20	11.5	22.5	0.8
0.82	26	22	12	22.5	0.8
1.0	26	24	13.5	22.5	0.8

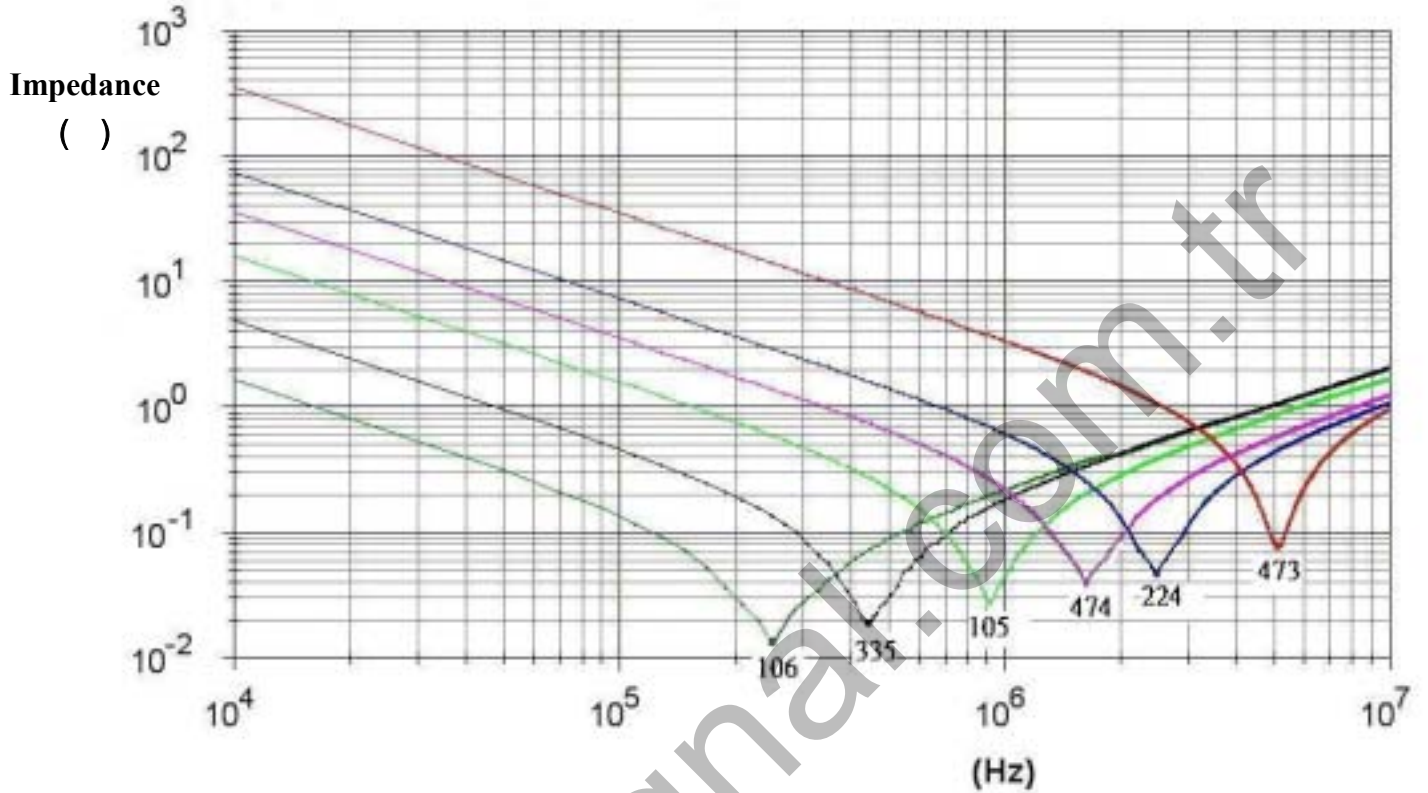
Cap \ Size	W	H	T	P	d $\phi$
0.47	31	18	9	27.5	0.8
0.56	31	20	10	27.5	0.8
0.68	31	20	10	27.5	0.8
0.82	31	21	11	27.5	0.8
1.0	31	22	13	27.5	0.8
1.5	31	24.5	15	27.5	0.8
2.2	31	28	18	27.5	0.8
3.3	41.5	30	18	37.5	1.0
3.9	41.5	32	20	37.5	1.0
4.7	41.5	35	21	37.5	1.0
5.6	41.5	36	24	37.5	1.0
6.8	41.5	39	26	37.5	1.0
8.2	41.5	41	29	37.5	1.0
10	41.5	45	32	37.5	1.0
-	-	-	-	-	-

- available in bulk, or in taped/reel for pitch 15mm, pitch 22.5m and pitch 27.5mm.\*

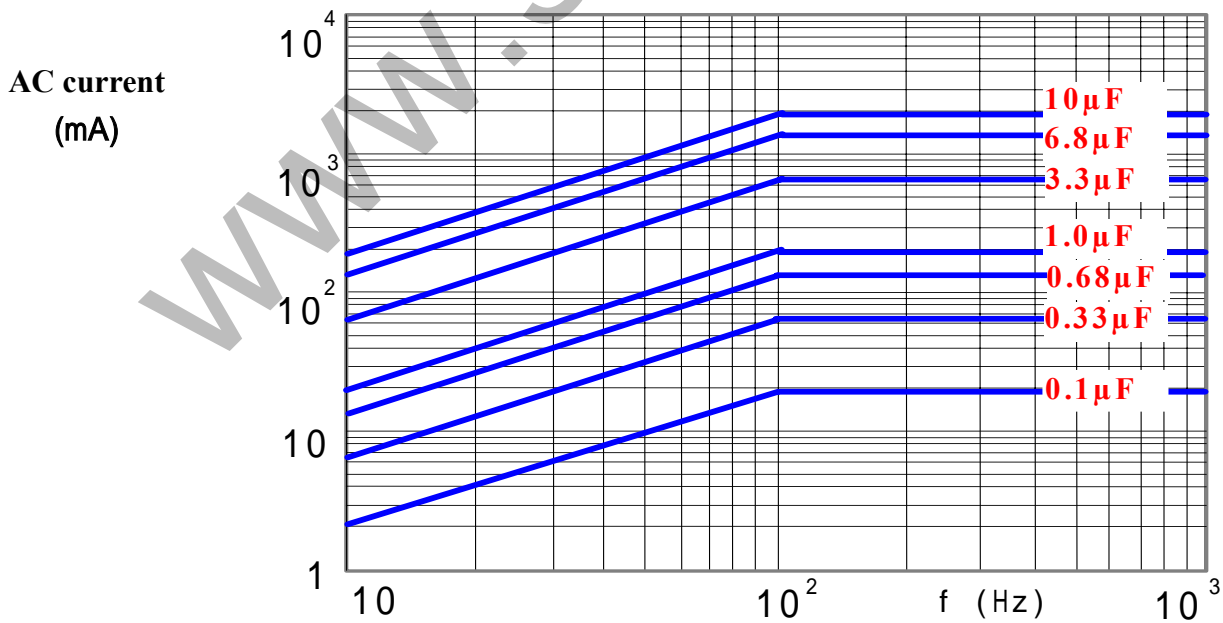


# Interference Suppression Capacitor

## IMPEDANCE



## AC current (RMS value)



AC current (RMS value) as a function of frequency at  $T_{\text{amb}} \leq 110$