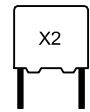


JENN FU ELECTRONICS CORPORATION



X2 CLASS FOR INTERFERENCE SUPPRESSION

TYPE : MPX

METALLIZED POLYPROPYLENE CAPACITOR

Typical applications :

interference suppression and across-the-line applications Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

This type especially is designed for radio interference suppression and across-the line capacitors in :

A.Business machines appliances, such as :typewriters, adding machines, computer displays and monitors.

B.Household appliances, such as : mixers, fans,coffee grinders, audio and TV circuits.

C.Thyristor and triac appliances, such as : dimmers.

General Technical Data

Dielectric : polypropylene film

Plates : metal layer deposited by evaporation under vacuum.

Winding :non-inductive type.

Leads : tinned wire.

Protection :

plastic case, polyurethane resin filled. Box material is solvent resistant and flame retardant according to UL94 V0.

Marking :

manufacturer's logo, series, capacitance, tolerance, rated voltage, capacitor class, dielectric code,climatic category, manufacturing date code,approvals, manufacturing plant.

Climatic category : GMF DIN 40040; 40/100/21/B

Operating temperature range : -40 to +100°C

Related documents :

DIN EN 60384-14(VDE 0565 Teil 1-1); IEC60384-14(ed.3); EN132400;

UL 60384-14/CSA E60384-14/-1/IEC 60384-14/-1

Electrical Characteristics

Climate Category :

In accordance with DIN40040 GMF

A.)G = Minimum Limit Temperature-40°C

B.)M = Maximum Limit Temperature+100°C

C.)F = Humidity Category ...Average relative humidity $\leq$ 75%, 95%, for 30 days per year, continuously; 85% for the remaining days, occasionally.

Rated Voltage :

50~60Hz

310VAC: UL ; cUL

275VAC:VDE/ENEC ; CQC

SAFETY APPROVALS

Approve Monogram		Country	Related Standard	Rated Voltage	Capacitance
UL		U.S.A.	UL60384-14	250VAC 275VAC 310VAC	0.001uF~1.0uF
cUL		Canada	UL 60384-14 CSA E60384-14	250VAC 275VAC 310VAC	0.001uF~1.0uF
ENEC		EEPCA	DIN EN60384-14 (VDE 0565 Teil 1-1) IEC 60384-14(ed.3)	275VAC	0.0047uF~1.0uF
VDE		GERMANY	DIN EN60384-14 (VDE 0565 Teil 1-1) IEC 60384-14(ed.3)	275VAC	0.0047uF~1.0uF
CQC		CHINA	GB/T 14472-1998	275VAC	0.0047uF~1.0uF

Capacitance Tolerance: J(5%), K(10%), M(20%)

Withstand Voltage :

A. Between Terminals ...1200V AC. 60 Hz or 2100V DC 1s.

B. Between Terminals and Case.....2000V AC. 60Hz 60s

Dissipation Factor :

A. $\leq 0.1\%$ at 1 KHz and 20°C

B. $\leq 0.3\%$ at 10KHz and 20°C

Insulation Resistance :

A. Between Terminals...

$\geq 3 \times 10^4 \text{ M}\Omega$ for $C \leq 0.33 \mu\text{F}$

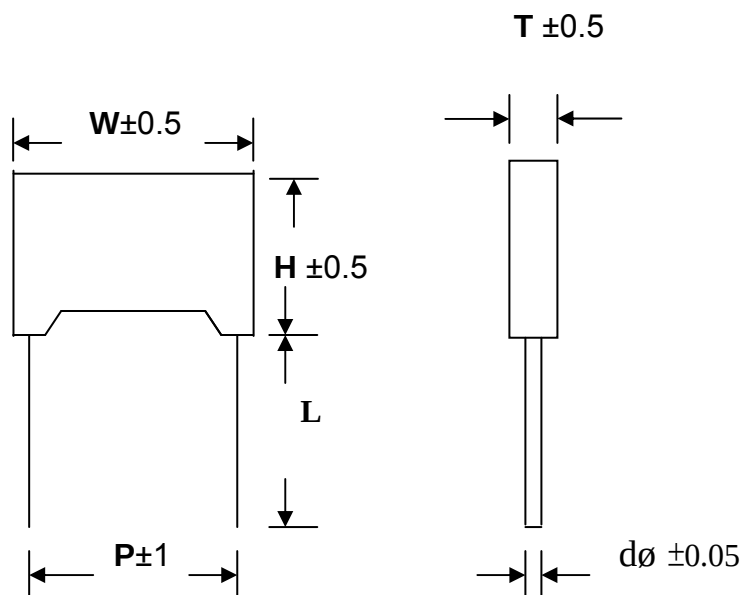
$\geq 1 \times 10^4 \text{ M}\Omega \mu\text{F}$ for $C > 0.33 \mu\text{F}$

B. Between Terminals and Case ... $\geq 3 \times 10^4 \text{ M}\Omega$

Measured at 100 ± 15 V DC. 60s. and 20°C

DRAWING

UNIT : mm



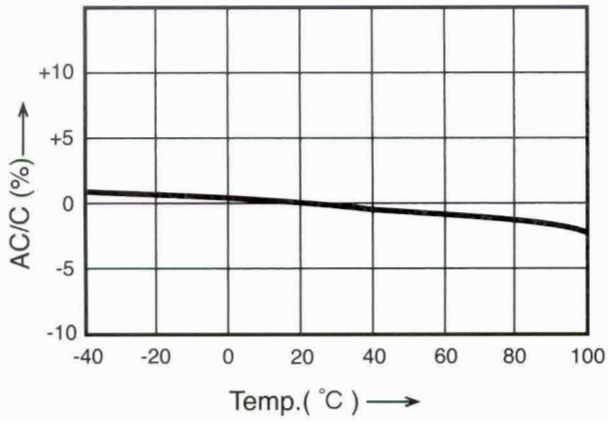
Dimension:(mm)

Capacitance	Rated-Voltage	Dimension (mm)					
μF	VAC	W	H	T	P	d ϕ	PART No.
0.001	310	13.0	11.0	5.0.	10.0	0.6	MPX102KC2
0.0022	310	13.0	11.0	5.0.	10.0	0.6	MPX222KC2
0.0033	310	13.0	11.0	5.0.	10.0	0.6	MPX332KC2
0.0047	310/275	13.0	11.0	5.0.	10.0	0.6	MPX472KC2
0.0056	310/275	13.0	11.0	5.0.	10.0	0.6	MPX562KC2
0.0068	310/275	13.0	11.0	5.0.	10.0	0.6	MPX682KC2

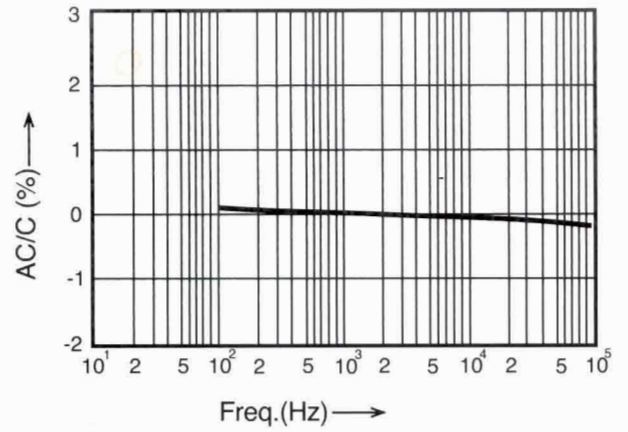
0.0082	310/275	13.0	11.0	5.0.	10.0	0.6	MPX822KC2
0.01	310/275	13.0	11.0	5.0.	10.0	0.6	MPX103KC2
0.01	310/275	18.0	11.0	5.0	15.0	0.8	MPX103KD1
0.012	310/275	18.0	11.0	5.0	15.0	0.8	MPX123KD1
0.015	310/275	18.0	11.0	5.0	15.0	0.8	MPX153KD1
0.018	310/275	18.0	11.0	5.0	15.0	0.8	MPX183KD1
0.022	310/275	13.0	11.0	5.0.	10.0	0.6	MPX223KC2
0.022	310/275	18.0	11.0	5.0	15.0	0.8	MPX223KD1
0.027	310/275	18.0	11.0	5.0	15.0	0.8	MPX273KD1
0.033	310/275	13.0	11.0	5.0.	10.0	0.6	MPX333KC2
0.033	310/275	18.0	11.0	5.0	15.0	0.8	MPX333KD1
0.039	310/275	18.0	11.0	5.0	15.0	0.8	MPX393KD1
0.047	310/275	13.0	11.0	5.0.	10.0	0.6	MPX473KC2
0.047	310/275	18.0	11.0	5.0	15.0	0.8	MPX473KD1
0.056	310/275	13.0	11.0	5.0.	10.0	0.6	MPX563KC2
0.056	310/275	18.0	11.0	5.0	15.0	0.8	MPX563KD1
0.068	310/275	13.0	11.0	5.0.	10.0	0.6	MPX683KC2
0.068	310/275	18.0	11.0	5.0	15.0	0.8	MPX683KD1
0.082	310/275	13.0	11.0	5.0.	10.0	0.6	MPX823KC2
0.082	310/275	18.0	12.0	6.0	15.0	0.8	MPX823KD2
0.1	310/275	13.0	12.0	6.0	10.0	0.6	MPX104KC3
0.1	310/275	18.0	12.0	6.0	15.0	0.8	MPX104KD2
0.15	310/275	13.0	13.0	7.0	10.0	0.6	MPX154KC4
0.15	310/275	18.0	12.0	6.0	15.0	0.8	MPX154KD2
0.15	310/275	18.0	14.5	8.5	15.0	0.8	MPX154KD4
0.22	310/275	18.0	13.5	6.3	15.0	0.8	MPX224KD25
0.22	310/275	18.0	14.5	8.5	15.0	0.8	MPX224KD4
0.22	310/275	26.5	16.5	7.0	22.5	0.8	MPX224KE2
0.27	310/275	18.0	16.0	10.0	15.0	0.8	MPX274KD5
0.33	310/275	18.0	14.5	8.5	15.0	0.8	MPX334KD4
0.33	310/275	18.0	16.0	10.0	15.0	0.8	MPX334KD5
0.33	310/275	26.5	17.0	8.5	22.5	0.8	MPX334KE3
0.39	310/275	26.5	19.0	10.0	22.5	0.8	MPX394KE4
0.47	310/275	18.0	16.0	10.0	15.0	0.8	MPX474KD5
0.47	310/275	18.0	17.7	8.5	15.0	0.8	MPX474KD8
0.47	310/275	26.5	17.0	8.5	22.5	0.8	MPX474KE3
0.47	310/275	26.5	19.0	10.0	22.5	0.8	MPX474KE4
0.47	310/275	32.0	20.0	11.0	27.5	0.8	MPX474KF1
0.56	310/275	26.5	19.0	10.0	22.5	0.8	MPX564KE4
0.68	310/275	18.0	18.5	11.0	15.0	0.8	MPX684KD6
0.68	310/275	26.5	19.0	10.0	22.5	0.8	MPX684KE4
0.68	310/275	32.0	20.0	11.0	27.5	0.8	MPX684KF1
0.82	310/275	26.5	21.5	12.5	22.5	0.8	MPX824KE6
1.0	310/275	26.5	21.5	12.5	22.5	0.8	MPX105KE6
1.0	310/275	32.0	22.0	13.0	27.5	0.8	MPX105KF2

Temperature and Frequency Characteristics

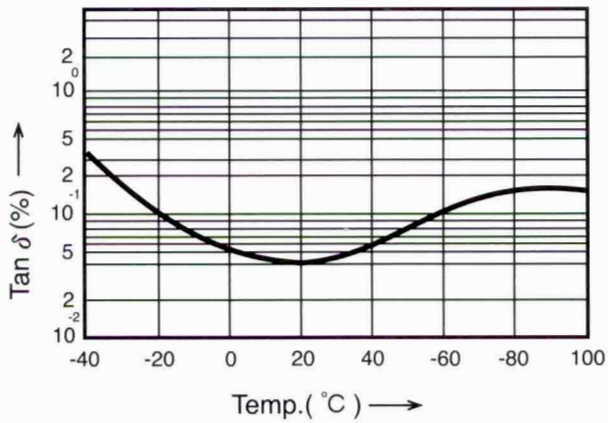
Capacitance Change vs.
Temperature(Typical Values)



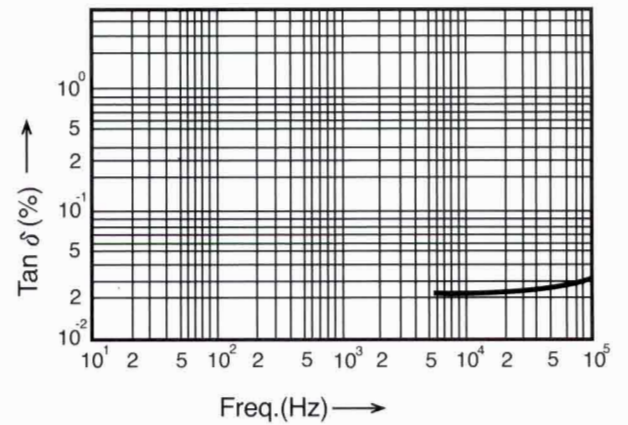
Capacitance Change vs.
Frequency (Typical Values)



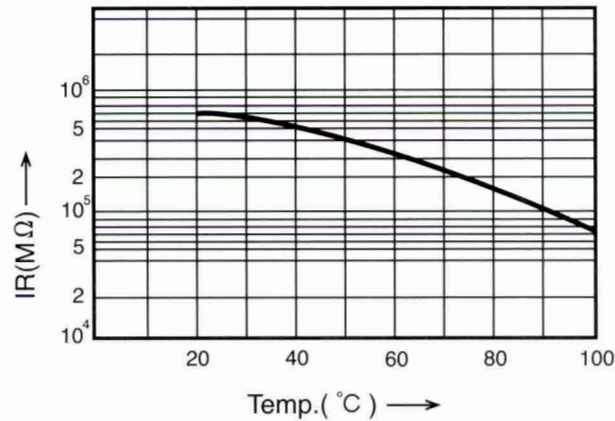
Dissipation factor vs.
Temperature at 10k Hz(Typical Values)



Dissipation factor vs.
Frequency (Typical Values)



Insulation Resistance vs.
Temperature(Typical Values)



**FOWX2.E184650****Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment**[Page Bottom](#)

Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment

See General Information for Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment

JENN FU ELECTRONICS CORP

E184650

16 LANE 256 HAI-WEI RD
CHUNG-HO HSIANG
SHING LUNG CHING
TAICHUNG, 434 TAIWAN

Type	V Rating	Capacitance Rating or Range	Series Resistance Rating or Range	Spark GAP
Across-the-line capacitors.				
MPX#	250; ac	0.0047 to 1.0 uF	—	—

#Suitable for use with special enclosure only.

Fixed Capacitors

Type Dsg	Capacitor Class	Voltage Rating (V)	Capacitance (μF) (Tolerance)	Resistance for RC Devices (ohms)	Lower Temp (°C)	Upper Temp (°C)
MPX	X2	250/275/310 Vac	0.001uF - 1uF, +/-20%##	—	-40	+100

##: the capacitance tolerance may be J for +/-5%, K for +/-10% or M for +/-20%.

Marking: Company name or trademarks "JF" or "JEFU" and type designation on product.

Last Updated on 2011-10-06

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FOWX8.E184650

Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment Certified for Canada[Page Bottom](#)**Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment Certified for Canada**

See General Information for Across-the-line Capacitors, Antenna-coupling Components, Line-bypass Components and Fixed Capacitors for Use in Electronic Equipment Certified for Canada

JENN FU ELECTRONICS CORP

E184650

16 LANE 256 HAI-WEI RD
CHUNG-HO HSIANG
SHING LUNG CHING
TAICHUNG, 434 TAIWAN

Type	V Rating	Capacitance Rating or Range	Series Resistance Rating or Range	Spark GAP
Across-the-line capacitors				
MPX#	250; ac	0.0047 to 1.0 uF	—	—

#Suitable for use with special enclosure only.

Fixed Capacitors

Type Dsg	Capacitor Class	Voltage Rating (V)	Capacitance (μF) (Tolerance)	Resistance for RC Devices (ohms)	Lower Temp (°C)	Upper Temp (°C)
MPX	X2	250/275/310 Vac	0.001uF - 1uF, +/-20%##	—	-40	+100

##: the capacitance tolerance may be J for +/-5%, K for +/-10% or M for +/-20%.

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Jenn Fu Electronics Corporation
No. 16, Lane 256, Hai-Wei Road
Village Chung-Ho
RC-Shing Lungching Taichung
TAIWAN

ist berechtigt, für ihr Produkt /
is authorized to use for their product

**Festkondensator zur Unterdrückung elektromagnetischer
Störungen, geeignet für Netzbetrieb**
*Fixed capacitor for electromagnetic interference
suppression and connection to the supply mains*

die hier abgebildeten markenrechtlich geschützten Zeichen
für die ab Blatt 2 aufgeführten Typen zu benutzen /
the legally protected Marks as shown below for the types referred to on page 2 ff.



Geprüft und zertifiziert nach /
Tested and certified according to

DIN EN 60384-14 (VDE 0565 Teil 1-1):2006-04; EN 60384-14:2005-08
IEC 60384-14(ed.3)

VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institute
Zertifizierungsstelle / *Certification*

Schipper

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Aktenzeichen: 2092400-4670-0002 / 98443

File ref.:

Ausweis-Nr. 40023085

Blatt 1

Certificate No.

Page

Weitere Bedingungen siehe Rückseite und Folgeblätter /
further conditions see overleaf and following pages

Offenbach, 2008-01-04

<http://www.vde.com/zertifikat>
<http://www.vde.com/certificate>

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Jenn Fu Electronics Corporation, No. 16, Lane 256, Hai-Wei Road, Village Chung-Ho, RC-Shing Lungching
Taichung, TAIWAN

Aktenzeichen / *File ref.*

2092400-4670-0002 / 98443 / FG32 / BT

Datum / *Date*

2008-01-04

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40023085.

This supplement is only valid in conjunction with page 1 of the Certificate No. 40023085.

**Festkondensator zur Unterdrückung elektromagnetischer
Störungen, geeignet für Netzbetrieb**
***Fixed capacitor for electromagnetic interference
suppression and connection to the supply mains***

Typ(en) / *Type(s)*:

MPX

Bemessungsspannung
Rated voltage

AC 275 V

Kapazitätsklasse und
-unterklasse

X2

Capacity Class and subclass

Bemessungskapazität

0,0047 μ F bis 1,0 μ F
Werteabstufung gemäss Reihe E12 nach
DIN IEC 60063:1985-12
0,0047 μ F to 1,0 μ F
Value assignment range E12
according to DIN IEC 60063:1985-12

Rated capacitance

Klimakat. und Kat. der
passiven Entflamm
Climatic category + letter for
pass. fla

40/100/21/C

Grenzabweichung der
Bemessungskapazität
Tolerance of rated capacitance

$\pm 10\%$ (K) und/and $\pm 20\%$ (M)

Weitere Einzelheit(en)
Further detail(s)

Anlage Nr. 1 bis 3
Enclosure No. 1 to 3

Fortsetzung siehe Blatt 3 /
continued on page 3



Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Jenn Fu Electronics Corporation, No. 16, Lane 256, Hai-Wei Road, Village Chung-Ho, RC-Shing Lungching
Taichung, TAIWAN

Aktenzeichen / *File ref.*

2092400-4670-0002 / 98443 / FG32 / BT

Datum / *Date*

2008-01-04

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40023085.

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VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institute
Fachgebiet FG32
Section FG32

B. Hopp



PRODUCT CERTIFICATE

Number : CQC04001009752

Applicant: JENN FU ELECTRONICS CORPORATION

Trade Mark: JEFU

Model/Name: MPX-X2-275VAC-(0.0047-1.0) μ F 275Vac 0.0047-1.0 μ F 阻
燃性类别: C级 气候类别: 40/100/21
Fixed capacitors for electromagnetic interference
suppression and connection to the supply mains

Standard: GB/T14472-1998

Factory: JENN FU ELECTRONICS CORPORATION

Address: No16 Lane256 Hai-wei Road village Chung-Ho, Shing Lunching
Taichung TAIWAN

Factory Code: V003570

Types of product certification system: The 5th Certification System

President :

李怀林



CHINA QUALITY CERTIFICATION CENTRE

No.15 Fangcaodixijie, Chaoyang District, Beijing 100020, P.R.China

<http://www.cqc.com.cn>

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