

Excellent Integrated System Limited

Stocking Distributor

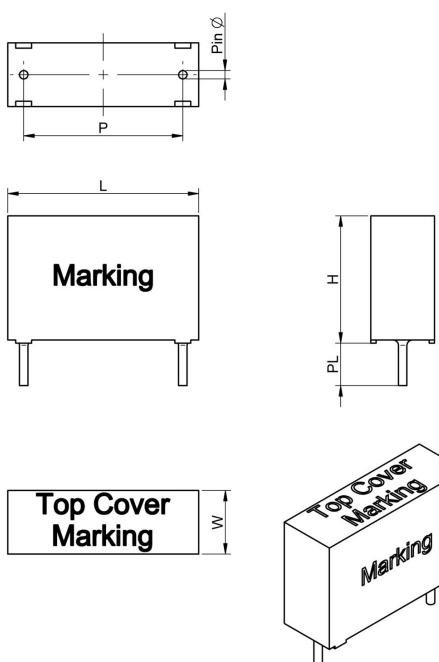
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Wurth Electronics Inc](#)
[890334026027](#)

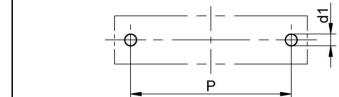
For any questions, you can email us directly:

sales@integrated-circuit.com

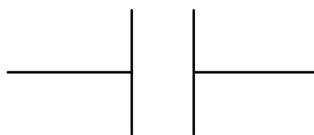
A Dimensions: [mm]



B Recommended hole pattern: [mm]



C Schematic:



P ±0.5	22.5
L ±0.5	26.0
H ±0.5	20.0
W ±0.5	11.0
PL min.	20.0
Pin Ø ±0.05	0.8
d1	1.1

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D1 Electrical Properties:

Properties	Test conditions	Value	Unit	Tol.
Capacitance	1 V / 1 kHz ± 0.2 kHz	C	1.0000	µF
Rated voltage		U _R	310	V (AC)
Isolation Resistance	1 min @ 100V (DC)	R _{ISO}	> 10000	MΩ • µF
Dissipation factor	@ 1 kHz	DF	< 0.10	%
Dissipation factor	@ 10 kHz	DF	< 0.70	%
Dissipation factor	@ 100 kHz	DF	-	%
Rate of Voltage Rise		dV / dt	170	V / µs
Dielectric strength Pin to Pin	1 minute		1333	V (DC)
Dielectric strength Pin to Case	1 minute		2000	V (AC)

E General information:

X2-Safety Class Capacitor; MKP - Metallized Polypropylene

Storage Conditions: 35°C, <45% RH

Operating Temperature: -40°C to +105°C

Climate category: 40/ 105/ 56/ B

Maximum Selfheating (rated): 7°C

Test conditions of Electrical Properties: 20°C, 33% RH

if not specified differently

FIT according to separate documentation

				Projection	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eSos@we-online.com	DESCRIPTION WCAP-FTXX Film Capacitors
REV	DATE	BY	CHECKED	Order.- No.	SIZE	
1.3	2015-04-16	SSI	PSL	890334026027	A4	
1.2	2014-08-14	SSI	PSL			
1.1	2014-05-20	SSI	PSL			
1.0	2014-01-22	SSI	PSL			



**Component Marking:**

Print	Description
1 st Line right	Matchcode: FTXX
2 nd Line right	Rated Voltage: 310 V~
3 rd Line right	Climate Category: 40/105/56/B
1 st Line left	Capacitance & Tolerance Code: 105K (Basis pF)
Bottom line	Certificates: ENEC, cULUS, CQC & Internal Marking
Top Cover Marking P < 15	Date Code: YWW
Top Cover Marking P ≥ 15	Date Code & Capacitance & Tolerance Code

D2 Approvals:

Properties	Standard	File
ENEC10 by VDE	IEC 60384 - 14	40038405
cULus	UL 60384 - 14 / CAN/CSA - E60384 - 14	E345659
CQC	IEC 60384 - 14	13001104050

D3 Mechanical Properties:

Properties	Test Conditions	Lead diameter [mm]	Force [N]	Condition
Termination Robustness	IEC 600668 - 2 - 21	Pull Test	0.5 to ≤ 0.8	10 min. 10 sec.
			0.9 to ≤ 1.25	20 min. 10 sec.
		Bend Test	0.5 to ≤ 0.8	5 min. 2 cycles
			0.9 to ≤ 1.25	10 min. 2 cycles

D4 Environmental Tests:

Properties	Standard	Test Conditions
Active Flammability	IEC 60384-14	max. 24 surge pulses @ 2.5 kV (one pulse every 5 seconds)
Passive Flammability	IEC 60384-14	in combination with IEC 60381 - 1 & IEC 60695 - 11 - 5
Vibration	IEC 60068 - 2 - 6	all 3 directions, 2 hours each @ 10 - 55 - 10 Hz, amplitude 0.75 mm or 10 g
Damp Heat	IEC 60068 - 2 - 78	40°C, 95% RH, 56 days
Temperature Cycles	IEC 60068 - 2 - 14	5 cycles, upper and lower temperature 30 min. each, 30 sec. transfer time
Charge/ Discharge Test	IEC 60384 - 14	$\sqrt{2} \times U_R$ @ 100 V/μs
Surge Test	IEC 60384 - 14	2.5 kV Surge impulses

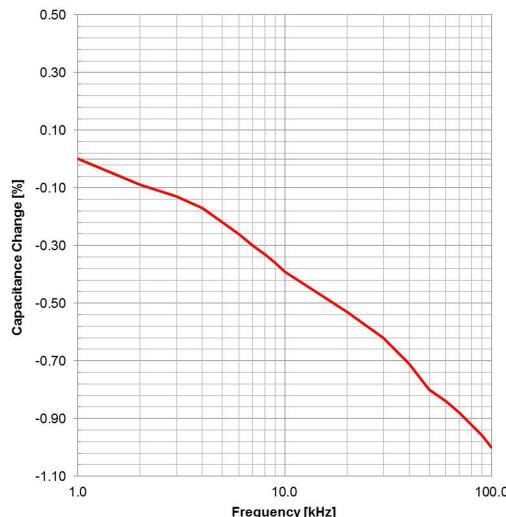
REV	DATE	BY	CHECKED	Projection	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eSos@we-online.com	DESCRIPTION	WCAP-FTXX Film Capacitors	Order - No.	SIZE
								890334026027	A4

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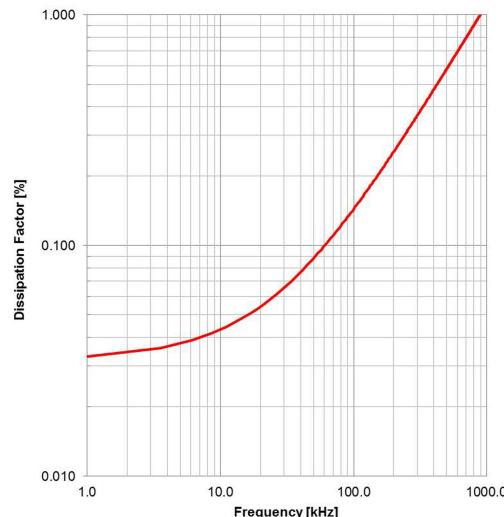


F1 Capacitance Change over Frequency:



Test Equipment: F4991A or equivalent

F2 Dissipation Factor over Frequency:

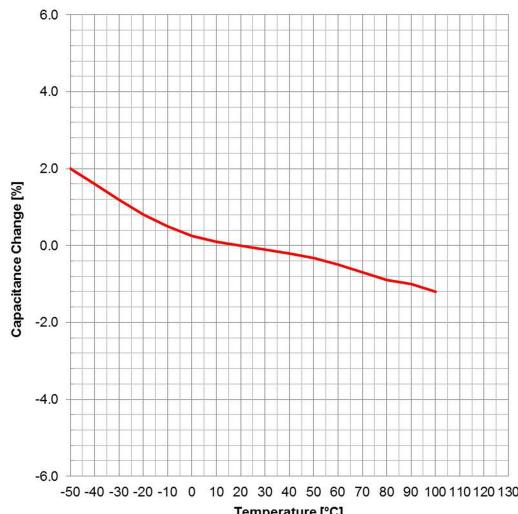


Test Equipment: F4991A or equivalent

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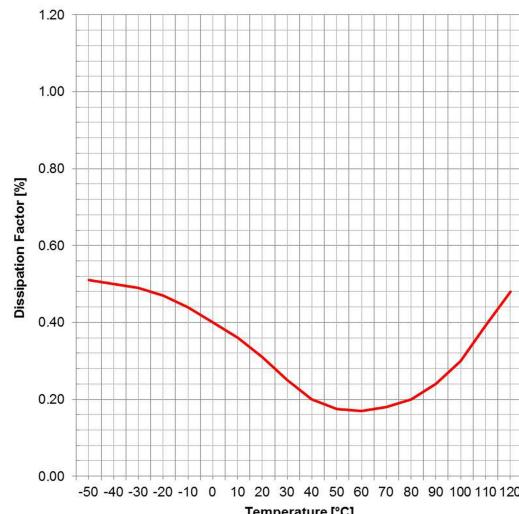


F3 Capacitance Change vs. Temperature:



Test Equipment: E4991A or equivalent

F4 Dissipation Factor vs. Temperature:



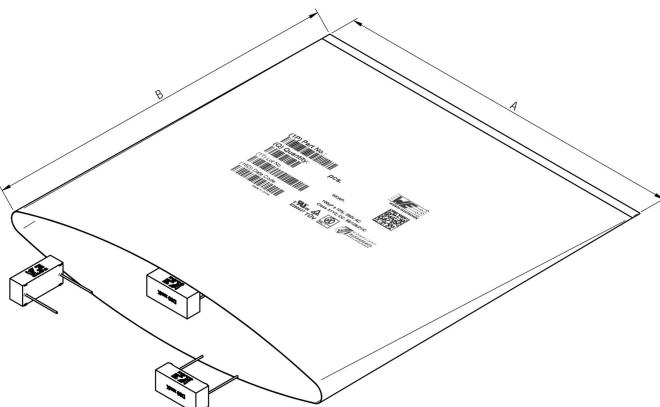
Test Equipment: E4991A or equivalent

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1.2	2014-08-14	SSI	PSL			
1.1	2014-05-20	SSI	PSL			
1.0	2014-01-22	SSI	PSL			
REV	DATE	BY	CHECKED			

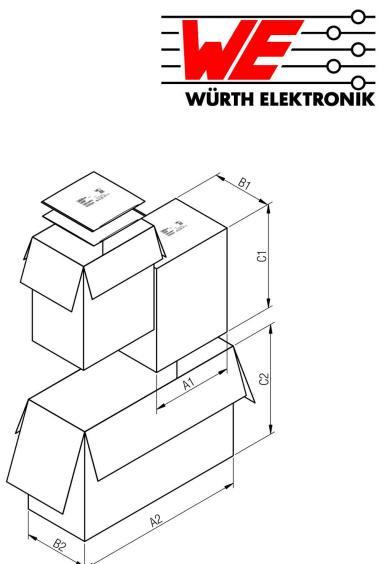


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G Packaging Specification - Bulk and Carton [mm]:



Pitch (mm)	Packaging Type	Material of Bulk	Packaging Unit / Bulk	A	B
			pcs.	mm	mm
7,5	Bulk	PET	500	200	200
10	Bulk	PET	500	200	200
12,5	Bulk	PET	500	200	200
15	Bulk	PET	500	250	300
22,5	Bulk	PET	200	250	300
27,5	Bulk	PET	80	300	300
37,5	Bulk	PET	40	300	300



size	Inner Carton	A1	B1	C1	Master Carton	A2	B2	C2
	no.	mm	mm	mm	no.	mm	mm	mm
FTX2	2	275,0	200,0	350,0	1	580,0	220,0	370,0
FTX2	2	275,0	200,0	350,0	1	580,0	220,0	370,0

DESCRIPTION								
WCAP-FTXX Film Capacitors								
Order - No.								
890334026027								SIZE A4

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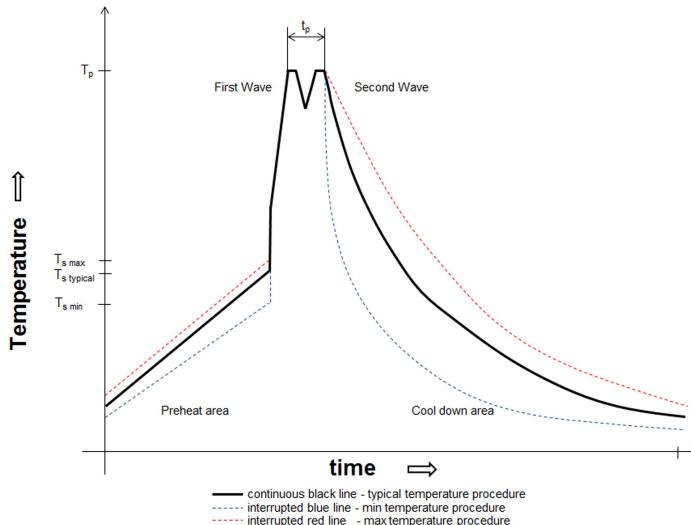
1.3	2015-04-16	SSI	PSL
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1.1	2014-05-20	SSI	PSL
1.0	2014-01-22	SSI	PSL
REV	DATE	BY	CHECKED



H Soldering Specifications:



H4: Classification Wave Soldering Profile:



H5: Classification Wave Profile

Profile Feature	Pb-Free Assembly	Sn-Pb Assembly
Preheat		
- Temperature Min (T_{smin})	100°C	100°C
- Temperature Typical ($T_{stypical}$)	120°C	120°C
- Temperature Max (T_{smax})	130°C	130°C
- Time (t_g) from (T_{smin} to T_{smax})	70 seconds	70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)	250°C - 260°C	235°C - 260°C
Time of actual peak temperature (t_p)	max. 10 seconds max. 5 second each wave	max. 10 seconds max. 5 second each wave
Ramp-down rate		
- Min	~ 2 K/s	~ 2 K/s
- Typical	~ 3.5 K/s	~ 3.5 K/s
- Max	~ 5 K/s	~ 5 K/s
Time 25°C to 25°C	4 minutes	4 minutes

refer to EN 61760-1:2006

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1.2	2014-08-14	SSt	PSL		
1.1	2014-05-20	SSt	PSL		
1.0	2014-01-22	SSt	PSL		
REV	DATE	RY	CHFCFKFD		
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I Cautions and Warnings:

The following conditions apply to all goods within the product series of WCAP-FTXX
of Würth Elektronik eiSos GmbH & Co. KG:

General:

The capacitor is engineered, designed and manufactured to be used within the data sheet specified values.
 Do not use the capacitor neither short term nor long term outside the specified values, which are given in the data sheet.



Product specific:

Follow all instructions mentioned in the data sheet, especially:

- The soldering profile has to be complied with according to the technical reflow soldering specification, otherwise this will void the warranty.
- Wave soldering is only allowed after evaluation and approval.
- Do not exceed the lower and/ or upper specified temperature!
- Do not use the capacitor with other than specified voltage!
- Prevent any kind of mechanical stress to the capacitor terminals!
- Do not use the soldered capacitor on a PCB for any movement or transportation to avoid any tensile force to the capacitor!
- Do not apply any kind of flexural or compressive force onto soldered or unsoldered component!
- Prevent the capacitor surface from any damage or scratches with sharp edges (e.g. chassis, screwdrivers, pincers)
- The capacitor must be placed on a PCB while using the recommended drill hole pattern without changing of the specific lead pitch!
- Avoid any other than specified temperature and / or time conditions during soldering!
- Avoid any overload or conditions that are not specified in the capacitors datasheet!
- Avoid any water or heavy dust on capacitors surface which may cause electrical leakage, damage, overheating or corrosion!

Storage conditions:

These film capacitors must be stored in stable climatic conditions, which are listed within the general information on front of data sheet.

Storage duration:

All products shall be used before the end of the period of 12 months based on the product date code, if not a 100% solderability can't be ensured.

Flammability:

Avoid any external energy or open fire (passive flammability).

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J Important Notes:

**The following conditions apply to all goods within the product range of
Würth Elektronik eiSos GmbH & Co. KG:**

1. General Customer Responsibility

Some goods within the product range of Würth Elektronik eiSos GmbH & Co. KG contain statements regarding general suitability for certain application areas. These statements about suitability are based on our knowledge and experience of typical requirements concerning the areas, serve as general guidance and cannot be estimated as binding statements about the suitability for a customer application. The responsibility for the applicability and use in a particular customer design is always solely within the authority of the customer. Due to this fact it is up to the customer to evaluate, where appropriate to investigate and decide whether the device with the specific product characteristics described in the product specification is valid and suitable for the respective customer application or not.

2. Customer Responsibility related to Specific, in particular Safety-Relevant Applications

It has to be clearly pointed out that the possibility of a malfunction of electronic components or failure before the end of the usual lifetime cannot be completely eliminated in the current state of the art, even if the products are operated within the range of the specifications.

In certain customer applications requiring a very high level of safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health it must be ensured by most advanced technological aid of suitable design of the customer application that no injury or damage is caused to third parties in the event of malfunction or failure of an electronic component.

Therefore, customer is cautioned to verify that data sheets are current before placing orders. The current data sheets can be downloaded at www.we-online.com.

3. Best Care and Attention

Any product-specific notes, cautions and warnings must be strictly observed. Any disregard will result in the loss of warranty.

4. Customer Support for Product Specifications

Some products within the product range may contain substances which are subject to restrictions in certain jurisdictions in order to serve specific technical requirements. Necessary information is available on request. In this case the field sales engineer or the internal sales person in charge should be contacted who will be happy to support in this matter.

5. Product R&D

Due to constant product improvement product specifications may change from time to time. As a standard reporting procedure of the Product Change Notification (PCN) according to the JEDEC-Standard inform about minor and major changes. In case of further queries regarding the PCN, the field sales engineer or the internal sales person in charge should be contacted. The basic responsibility of the customer as per Sections 1 and 2 remains unaffected.

6. Product Life Cycle

Due to technical progress and economical evaluation we also reserve the right to discontinue production and delivery of products. As a standard reporting procedure of the Product Termination Notification (PTN) according to the JEDEC-Standard we will inform at an early stage about inevitable product discontinuance. According to this we cannot guarantee that all products within our product range will always be available. Therefore it needs to be verified with the field sales engineer or the internal sales person in charge about the current product availability expectancy before or when the product for application design-in disposal is considered.

The approach named above does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.

7. Property Rights

All the rights for contractual products produced by Würth Elektronik eiSos GmbH & Co. KG on the basis of ideas, development contracts as well as models or templates that are subject to copyright, patent or commercial protection supplied to the customer will remain with Würth Elektronik eiSos GmbH & Co. KG.

Würth Elektronik eiSos GmbH & Co. KG does not warrant or represent that any license, either expressed or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, application, or process in which Würth Elektronik eiSos GmbH & Co. KG components or services are used.

8. General Terms and Conditions

Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms and Conditions of Würth Elektronik eiSos Group", last version available at www.we-online.com.



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