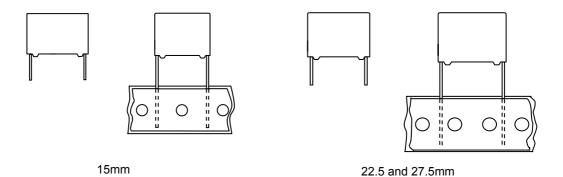
PCX2 347

MKT RADIAL POTTED CAPACITORS

Pitch 15.0/22.5/27.5mm



QUICK REFERENCE DATA

Capacitance range (E6 series) *	0.1 μF to 2.2 μF
Capacitance tolerance	± 10 %, ± 20 %
Rated (AC) voltage 50 to 60 Hz	310 V [~]
Climatic category	55/110/56
Temperature range	-55℃ ~+110℃
Reference IEC, UL specification	IEC 60384-14(3rd edition) and UL60384-14
Safety approvals	ENEC
	UL60384-14
Potting & Encapsulation material	Qualified in accordance with UL 94V-0
Safety class	X2

^{*} Intermediate values of the E12 series are available to special order

FEATURES

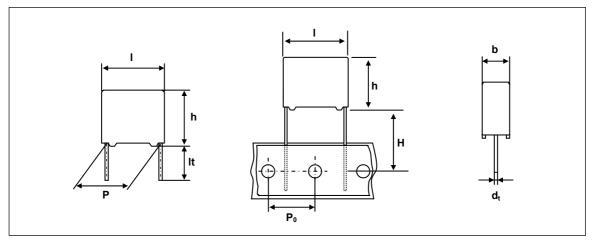
- . 15.0 to 27.5 mm lead pitch
- . Supplied loose in box and taped on reel
- . Consist of a low-inductive wound cell of Metallized Polyester film, potted in a flame retardant case

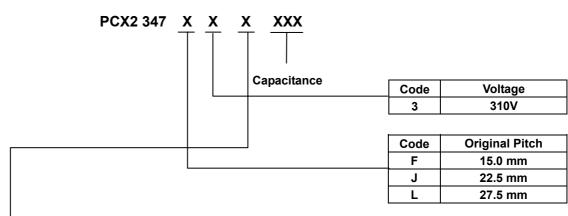
APPLICATIONS

- . For X2-electromagnetic interference suppression
- . Specially designed to meet the NEW REQUIREMENTS in new IEC 60384-14 specification(3rd edition)/UL 60384-14 requiring for X2 a 2.5kV peak pulse voltage test
- . Energy meter
- . Stable capacitance in damp environment 85℃85%RH, 240Vac, 1000hours

Main application _ In series with the powerline (capacitive power supply) L C R Application Application

Ordering Information





Available versions				Product (I _{max})			
code	Packing method	C – tol. Lead length & Height	Lead length	Hole	18.0	26.0	31.0
			to hole (P _o)	Pitch (P)			
0	Loose in box	±20%	It = 5.0 ± 1.0mm	-	15.0	22.5	27.5
1	Loose in box	±10%	It = 5.0 ± 1.0mm	-	15.0	22.5	27.5
4	Loose in box	±20%	It =25.0 ± 2.0mm	-	15.0	22.5	27.5
5	Loose in box	±10%	It =25.0 ± 2.0mm	-	15.0	22.5	27.5
6	Ammopack	±20%	H = 18.5mm*	12.7mm	15.0	22.5	27.5
7	Ammopack	±10%	H = 18.5mm*	12.7mm	15.0	22.5	27.5

^{*} H ; intape height ; for detailed specifications refer to chapter PACKAGING ** Some values is not following the coding rule.

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SAFETY APPROVALS

SAFETY APPROVALS	Voltage	Value	File Number
UL60384-14	310V(AC)	0.1 <i>μ</i> F to 2.2 <i>μ</i> F	E165646
ENEC(SEMKO) *	310V(AC)	0.1 <i>µ</i> F to 2.2 <i>µ</i> F	SE/0256-7

^{*} The ENEC-approval together with the CB-Certificate replace all national approval marks of the following countries(they have already signed the ENEC-Agreement): Austria; Belgium; Czech. Republic; Denmark; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Luxembourg; Netherlands; Norway; Portugal; Slovenian; Spain; Sweden; Switzerland and United Kingdom

Packaging Information

SMALLEST PACKING QUANTITIES (SPQ)	LOOSE IN BOX		
DIMENSIONS	It = 5.0 ± 1.0 mm	It = 25 ± 2.0 mm	
6.0 x 12.0 x 18.0	1000	1000	
7.0 x 13.5 x 18.0	1000	1000	
8.5 x 13.5 x 18.0	1000	1000	
8.5 x 15.0 x 18.0	1000	1000	
10.0 x 16.5 x 18.0	1000	1000	
11.0 x 18.5 x 18.0	1000	1000	
8.5 x 18.0 x 26.0	500	500	
10.0 x 19.5 x 26.0	500	500	
11.5 x 21.0 x 26.0	500	500	
13.0 x 23.0 x 26.0	500	500	
16.5 x 22.0 x 26.0	250	250	
9.0 x 18.0 x 31.0	500	500	
10.0 x 20.0 x 31.0	500	250	
11.0 x 21.0 x 31.0	500	250	
13.0 x 23.0 x 31.0	250	250	
21.0 x 31.0 x 31.0	150	150	

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SPECIFIC REFERENCE DATA FOR 310 V_{AC}

Tangent of loss angle	at 1 khz	at 10 khz	
C ≤ 1 <i>µ</i> F	$\leq 80 \times 10^{-4}$	$\leq 150 \times 10^{-4}$	
C > 1 µF	\leq 80 x 10 ⁻⁴	_	
Rated voltage pulse slope (dV/dt) _R	100 V/ <i>μ</i> s		
R between leads, for C \leq 0.33 μ F	> 15 000 MΩ		
RC between leads, for C > 0.33 μ F	> 5 000 s		
Withstanding(DC) Voltage (cut-off current 10mA)	4.3* V _R , 1min		
Withstanding(AC) Voltage between leads and case	2400 V ; 1 min		

$V_{Rac} = 310V^{\sim} X2$

loose and taped

			CATALOGUE NUMBER				
_			PCX2 347				
Cap.	bxhxl	MASS	loose in box				
(<i>μ</i> F)	(mm)	(g)	It = 5 ±	1.0 mm	It = 25 ± 2.0 mm		
			C – tol. ±20 %	C – tol. ±10 %	C – tol. ±20 %	C – tol. ±10 %	
	Pitch = 1	5.0 ± 0		dt = 0.8 + 0.08/-0		210 //	
0.1	6.0 x 12.0 x 18.0	1.4	F30104	F31104	F34104	F35104	
0.15	7.0 x 13.5 x 18.0	1.9	F30154	F31154	F34154	F35154	
0.22	8.5 x 15.0 x 18.0	2.6	F30224	F31224	F34224	F35224	
0.33	10.0 x 16.5 x 18.0	3.1	F30334	F31334	F34334	F35334	
0.47	11.0 x 18.5 x 18.0	4.1	F30474	F31474	F34474	F35474	
Pitch = 22.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm							
0.33	7.0 x 16.5 x 26.0	3.2	J30334	J31334	J34334	J35334	
0.47	8.5 x 18.0 x 26.0	4.4	J30474	J31474	J34474	J35474	
0.68	10.0 x 19.5 x 26.0	5.5	J30684	J31684	J34684	J35684	
1.0	12.0 x 22.0 x 26.0	9.0	J30105	J31105	J34105	J35105	
1.5	16.5 x 22.0 x 26.0	10.0	J30155	J31155	J34155	J35155	
Pitch = 27.5 \pm 0.4 mm dt = 0.8 +0.08/-0.05 mm							
0.47	9.0 x 19.0 x 31.0	5.5	L30474	L31474	L34474	L35474	
0.68	10.0 x 20.0 x 31.0	6.5	L30684	L31684	L34684	L35684	
1.0	11.0 x 21.0 x 31.0	7.8	L30105	L31105	L34105	L35105	
1.5	13.0 x 23.0 x 31.0	10.4	L30155	L31155	L34155	L35155	
2.2	21.0 x 31.0 x 31.0	20.5	L30225	L31225	L34225	L35225	

MOUNTING

NORMAL USE

The capacitors are designed for mounting on printed-circuit boards.

The capacitors packed in bandoliers are designed for mounting on printed-circuit boards by means of automatic insertion machines.

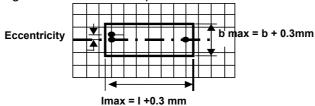
For detailed specifications refer to chapter "PACKAGING".

SPECIFIC METHOD OF MOUNTING TO WITHSTAND VIBRATION AND SHOCK In order to withstand vibration and shock tests, it must be ensured that the stand-off pips are in good contact with the printed-circuit board.

- . For pitches of 15mm the capacitors shall be mechanically fixed by leads.
- . For larger pitches the capacitors shall be mounted in the same way and the body clamped.

SPACE REQUIREMENTS ON PRINTED-CIRCUIT BOARD

The maximum length and width of film capacitors are shown in the following drawing;



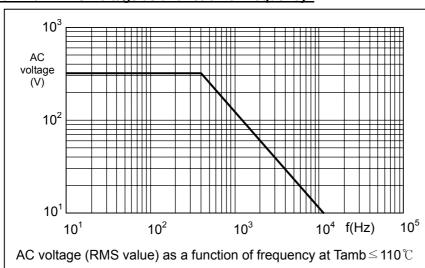
- Product height with seating plane as given by IEC 60717 as reference : $h_{max} \le h+0.3mm$

RATINGS AND CHARACTERISTICS

Unless otherwise specified all electrical values apply to an ambient temperature of $23\pm1\,^{\circ}$ C, an atmospheric pressure of 86 to 106kPa and a relative humidity $50\pm2\%$.

For reference testing, a conditioning period shall be applied of 96 ± 4 hours by heating the products in a circulating air oven at the rated temperature and a relative humidity not exceeding 20%.

Maximum RMS Voltage as a function of frequency



PCX2 347

Series Impedance Film capacitors

PRODUCT MARKING

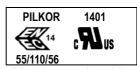
Capacitors are marked with having following information;

- 1.Manufacturer (PILKOR)
- 2.Manufacturer's type designation (PCX2 347)
- 3.Rated capacitance in code according to IEC 60062
- 4.Rated (AC) voltage (310V~)
- 5.Sub class (X2)
- 6. Tolerance on rated capacitance M = ± 20 % K = ± 10 %
- 7.Climatic category (55/110/56)
- 8.Metallized polyester film (MKT)
- 9. Year and week of manufacturing (e.g 1401)
- 10.Safety approvals

Example of marking

Pitch P = 15.0mm or P = 22.5 mm or P = 27.5mm

150n M 310V~ X2 PCX2 347 MKT



Marking on the top

Marking on the side

Pitch P = 22.5 mm or P = 27.5 mm



Marking on headface