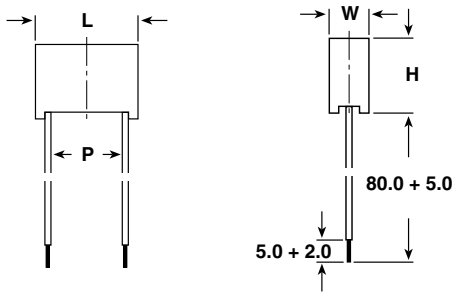
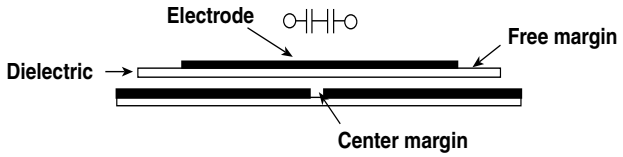
AC-Capacitors, Suppression Capacitors
Class X2 AC 310 V (MKT)

Dimensions in mm





MAXIMUM PULSE RISE TIME: (dU/dt) in V/µs

RATED VOLTAGE	PITCH P (mm)			
	≤ 15.0	≤ 22.5	≤ 27.5	≤ 37.5
AC 310 V	200	150	100	100

RATED VOLTAGE
AC 310 V, 50/60 Hz

PERMISSIBLE DV VOLTAGE
DC 630 V

TERMINALS
Insulated stranded copper wire, type LiY 0.5 mm^2 (or AWG 20) ends stripped

COATING
Plastic case, epoxy resin sealed, flame retardant UL 94 V-0

CLIMATIC TESTING CLASS ACC. TO EN 60068-1
40/100/56

CAPACITANCE RANGE
E12 series 0.01 µF X2 - 2.2 µF X2
preferred values acc. to E6

CAPACITANCE TOLERANCE
Standard: ± 10 %

FEATURES
• Compliant to RoHS directive 2002/95/EC

Pb-free

e3

RoHS COMPLIANT

DISSIPATION FACTOR tan δ
< 1 % measured at 1 kHz

INSULATION RESISTANCE
FOR C ≤ 0.33 µF:
30 GΩ average value
15 GΩ minimum value

TIME CONSTANT FOR C > 0.33 µF
10 000 s average value
5000 s minimum value

TEST VOLTAGE
(Electrode/electrode): DC 2150 V/2 sec.

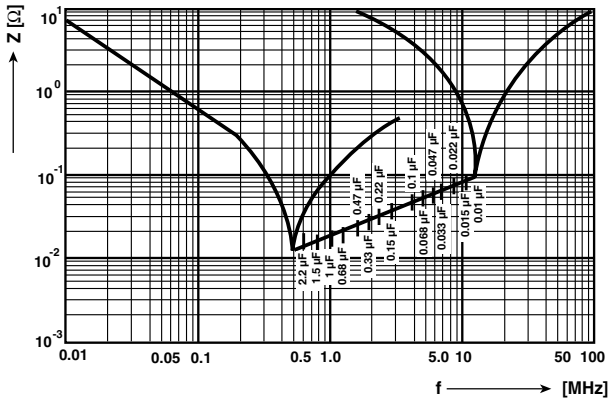
REFERENCE STANDARDS
EN 132 400, 1994
EN 60068-1
IEC 60384-14/2, 1993
UL 1283
UL 1414
CSA 22.2 No. 8-M 86
CSA 22.2 No. 1-M 90

DIELECTRIC
Polyester film

ELECTRODES
Metal evaporated

CONSTRUCTION
Metallized film capacitor
Internal series connection

Between interconnected terminations and case (foil method):
AC 2500 V for 2 s at 25 °C



Impedance (Z) as a function of frequency (f) at T_a = 20 °C (average).
Measurement with lead length 80 mm.

APPROVALS

COUNTRY	SPECIFICATION	ELECTRICAL VALUES	APPROVAL REFERENCE	APPROVAL MARK
U.S.A. (for AC 250 V)	UL 1283 UL 1414	0.01 - 2.2 µF X 0.01 - 1.0 µF X	E 76297 E 100682	
CB TEST-CERTIFICATE (for AC 310 V)		0.01 - 2.2 µF X2	DE1-40110/A1	
Germany	EN 132 400; 1999 IEC 60384-14, 2nd edition, 1995	0.01 - 2.2 µF X2	40005079	
This approval mark together with the CB-Certificate replace all national approval marks of the following countries (they have already signed the CB-Agreement):				
Austria	Belgium	Denmark	Finland	Sweden
France	Germany	Ireland	Italy	Switzerland
Netherlands	Israel	Portugal	Spain	Great Britain
Japan	Norway	China	Poland	Czech. Republic
Singapore	Rep. of Korea	Hungary	Iceland	Slovenia

CAPACITANCE	TOL. (%)	PITCH P (mm)	BOX NO.	DIMENSIONS W x H x L (mm) (+ 0.2/ - 0.4 mm)	WEIGHT (g)	QUANTITY PACKAGE (pcs)	ORDERING CODE**
0.01 µF X2	**± 10**	**15.0**	**05**	**5.3 x 10.3 x 17.8**	**2.6**	**1000**	**F1774-310-2 . . .-E3**
0.012 µF X2	± 10	15.0	05	5.3 x 10.3 x 17.8	2.6	1000	F1774-312-2 . . .-E3
0.015 µF X2	**± 10**	**15.0**	**05**	**5.3 x 10.3 x 17.8**	**2.6**	**1000**	**F1774-315-2 . . .-E3**
0.018 µF X2	± 10	15.0	05	5.3 x 10.3 x 17.8	2.6	1000	F1774-318-2 . . .-E3
0.022 µF X2	**± 10**	**15.0**	**05**	**5.3 x 10.3 x 17.8**	**2.6**	**1000**	**F1774-322-2 . . .-E3**
0.027 µF X2	± 10	15.0	05	5.3 x 10.3 x 17.8	2.6	1000	F1774-327-2 . . .-E3
0.033 µF X2	**± 10**	**15.0**	**05**	**5.3 x 10.3 x 17.8**	**2.6**	**1000**	**F1774-333-2 . . .-E3**
0.039 µF X2	± 10	15.0	06	6.3 x 12.3 x 17.8	3.2	850	F1774-339-2 . . .-E3
0.047 µF X2	**± 10**	**15.0**	**06**	**6.3 x 12.3 x 17.8**	**3.2**	**850**	**F1774-347-2 . . .-E3**
0.056 µF X2	± 10	15.0	06	6.3 x 12.3 x 17.8	3.2	850	F1774-356-2 . . .-E3
0.068 µF X2	**± 10**	**15.0**	**07**	**7.3 x 13.3 x 17.8**	**3.6**	**800**	**F1774-368-2 . . .-E3**
0.082 µF X2	± 10	15.0	08	8.3 x 14.3 x 17.8	3.9	800	F1774-382-2 . . .-E3
0.1 µF X2	**± 10**	**15.0***	**08**	**8.3 x 14.3 x 17.8**	**3.9**	**800**	**F1774-410-2 . . .-E3**
0.12 µF X2	± 10	15.0*	08	8.3 x 14.3 x 17.8	3.9	800	F1774-412-2 . . .-E3
0.15 µF X2	**± 10**	**22.5***	**11**	**7.3 x 15.3 x 26.3**	**5.3**	**500**	**F1774-415-2 . . .-E3**
0.18 µF X2	± 10	22.5*	11	7.3 x 15.3 x 26.3	5.3	500	F1774-418-2 . . .-E3
0.22 µF X2	**± 10**	**22.5***	**12**	**8.3 x 16.3 x 26.3**	**5.8**	**500**	**F1774-422-2 . . .-E3**
0.27 µF X2	± 10	22.5*	13	10.3 x 18.3 x 26.3	7.9	500	F1774-427-2 . . .-E3
0.33 µF X2	**± 10**	**22.5***	**13**	**10.3 x 18.3 x 26.3**	**7.9**	**500**	**F1774-433-2 . . .-E3**
0.39 µF X2	± 10	27.5*	14	11.0 x 21.0 x 31.0	10.3	350	F1774-439-2 . . .-E3
0.47 µF X2	± 10	27.5*	14	**11.0 x 21.0 x 31.0**	10.3	350	**F1774-447-2 . . .-E3**
0.56 µF X2	± 10	27.5*	14	11.0 x 20.3 x 31.3	10.3	350	F1774-456-2 . . .-E3
0.68 µF X2	**± 10**	**27.5***	**15**	**13.3 x 23.3 x 31.3**	**14.1**	**300**	**F1774-468-2 . . .-E3**
0.82 µF X2	± 10	27.5*	15	13.0 x 23.3 x 31.3	16.2	250	F1774-482-2 . . .-E3
1.0 µF X2	**± 10**	**27.5***	**18**	**14.5 x 24.3 x 31.3**	**16.2**	**250**	**F1774-510-2 . . .-E3**
1.2 µF X2	± 10	37.5*	16	14.0 x 24.3 x 41.3	20.1	200	F1774-512-2 . . .-E3
1.5 µF X2	**± 10**	**37.5***	**19**	**15.5 x 28.3 x 41.3**	**20.1**	**200**	**F1774-515-2 . . .-E3**
1.8 µF X2	± 10	37.5*	19	15.5 x 28.3 x 41.3	25.2	150	F1774-518-2 . . .-E3
2.2 µF X2	**± 10**	**37.5***	**20**	**17.8 x 32.3 x 41.3**	**32.8**	**200**	**F1774-522-2 . . .-E3**

Preferred values in bold print.

Inbuilt discharging resistor on request (with larger case dimensions).

* Different pitch on request.

** With mark, the ordering code is F1774-. . .-2400-E3.

The suffix “E3” is used for the RoHS-compliant version, although in most cases this is the only available version.

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