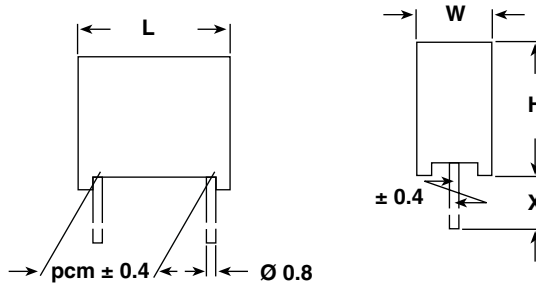
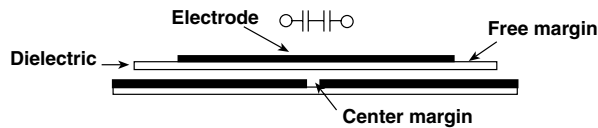


AC-Capacitors, Suppression Capacitors Class X2 AC 440 V (MKT)

Dimensions in mm



LEAD LENGTH X (mm)	ORDERING CODE**
4 ⁻¹	F1772-...-4204/4264
6 ⁻¹	F1772-...-4200/4260
15 ⁻¹	F1772-...-4215/4265
30 ⁺⁵	F1772-...-4230/4263


MAXIMUM PULSE RISE TIME: (d_U/d_t) in V/μs

RATED VOLTAGE	PITCH (mm)			
	15.0	22.5	27.5	37.5
AC 440 V	200	150	100	100

RATED VOLTAGE:

AC 440 V, 50/60 Hz

PERMISSIBLE DC VOLTAGE:

DC 1000 V

TERMINALS:

Radial tinned copper wire

COATING:

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

CLIMATIC TESTING CLASS ACC.TO EN 60068-1:

40/100/56

CAPACITANCE RANGE:

E6 series 0.01 μFX2 - 1.0 μFX2

E12 values on request

FURTHER TECHNICAL DATA:

See page 21 (Document No 26504)

FEATURES:

Product is completely lead (Pb)-free

Product is RoHS compliant

CAPACITANCE TOLERANCE:

Standard: ± 20 %

DISSIPATION FACTOR TANδ:

< 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 sec. average value

5000 sec. 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

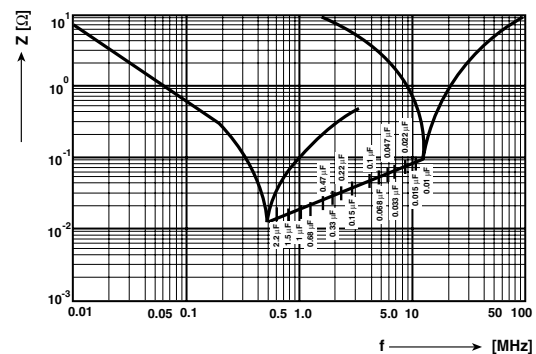
CONSTRUCTION:

Metallized film capacitor

Internal series connection

Between interconnected terminations and case (foil method):

AC 2500 V for 2 sec. at 25 °C.


Impedance (Z) as a function of frequency (f) at $T_a = 20\text{ °C}$ (average). Measurement with lead length 6 mm.

Vishay Roederstein AC-Capacitors, Suppression Capacitors Class X2 AC 440 V (MKT)

APPROVALS

COUNTRY	SPECIFICATION	ELECTRICAL VALUES	APPROVAL REFERENCE	APPROVAL MARK
U.S.A. (for AC 250 V)	UL 1283 UL 1414	0.01 - 1.0 μ FX 0.01 - 1.0 μ FX	E 76297 E 100682	
Canada (for AC 250 V)	C 22.2 No. 8-M 1986 C 22.2 No. 1-M 1994	0.01 - 1.0 μ FX 0.01 - 0.82 μ FX	LR 64546 LR 64546-8	
CB TEST-CERTIFICATE (for AC 440 V)		0.01 - 1.0 μ FX2	DE 1-8221	
Germany	EN 132 400; 1999 IEC 60384-14, 2nd edition, 1995	0.01 - 1.0 μ FX2	40005095	
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 (mm)	BOX NO.	DIMENSIONS W x H x L (mm) (+ 0.2/- 0.4 mm)	WEIGHT LEAD LENGTH 6 ⁻¹ mm (g)	QUANTITY PACKAGE LEAD LENGTH ≤ 6 ⁻¹ mm (pcs)*	ORDERING CODE**
0.01 μ FX2	± 20	15.0	05	5.3 x 10.3 x 17.8	1.4	750	F1772-310-42 ..
0.015 μ FX2	± 20	15.0	49	6.0 x 12.0 x 17.9	2.0	600	F1772-315-42 ..
0.022 μ FX2	± 20	15.0	07	7.3 x 13.3 x 17.8	2.0	450	F1772-322-42 ..
0.033 μ FX2	± 20	15.0	08	8.3 x 14.3 x 17.8	2.7	325	F1772-333-42 ..
0.047 μ FX2	± 20	22.5	09	6.3 x 14.3 x 26.3	3.3	260	F1772-347-42 ..
0.047 μ FX2	± 20	15.0	28	8.3 x 17.3 x 17.8	3.5	300	F1772-347-426 .
0.068 μ FX2	± 20	22.5	11	7.3 x 15.3 x 26.3	4.1	235	F1772-368-42 ..
0.068 μ FX2	± 20	15.0	35	10.3 x 17.3 x 17.8	4.3	225	F1772-368-426 .
0.1 μ FX2	± 20	22.5	12	8.3 x 16.3 x 26.3	4.6	200	F1772-410-42 ..
0.1 μ FX2	± 20	15.0	36	13.3 x 22.3 x 17.8	4.2	185	F1772-410-426 .
0.15 μ FX2	± 20	27.5	29	8.8 x 18.3 x 31.3	6.8	160	F1772-415-42 ..
0.15 μ FX2	± 20	22.5	13	10.3 x 18.3 x 26.3	6.7	170	F1772-415-426 .
0.22 μ FX2	± 20	27.5	14	11.0 x 20.3 x 31.3	9.1	125	F1772-422-42 ..
0.22 μ FX2	± 20	22.5	27	12.3 x 19.8 x 26.3	8.7	125	F1772-422-426 .
0.33 μ FX2	± 20	27.5	15	13.0 x 23.3 x 31.3	12.9	110	F1772-433-42 ..
0.33 μ FX2	± 20	22.5	38	15.3 x 26.3 x 26.3	14.3	110	F1772-433-426 .
0.47 μ FX2	± 20	37.5	44	12.0 x 22.3 x 41.3	15.2	90	F1772-447-42 ..
0.47 μ FX2	± 20	27.5	17	16.0 x 29.3 x 31.3	20.0	85	F1772-447-426 .
0.68 μ FX2	± 20	37.5	19	15.5 x 28.3 x 41.3	24.0	70	F1772-468-42 ..
0.68 μ FX2	± 20	27.5	40	17.8 x 32.8 x 31.3	24.4	80	F1772-468-426 .
1.0 μ FX2	± 20	37.5	20	17.8 x 32.3 x 41.3	31.6	60	F1772-510-42 ..
1.0 μ FX2	± 20	27.5	41	19.5 x 34.8 x 31.3	29.5	70	F1772-510-426 .

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

* Further information about packaging quantities with different lead length and/or taped versions.

See page 16 (Document No 27608 Packing Quantities). Use Box No. as reference

** These capacitors can be delivered on continuous tape and reel - see page 14/15 (Document Number 27622).

The ordering code is: F1772-...-4290 at H = 16.5 mm

F1772-...-4291 at H = 18.5 mm

F1772-...-4960 at H = 16.5 mm

F1772-...-4961 at H = 18.5 mm

**APPLICATION NOTES**

- For X2 electromagnetic interference suppression in **across the line applications** (50/60 Hz) with a maximum mains voltage of 440 V (AC).
- These capacitors are not intended for continuous pulse applications. For these situations, capacitors of the AC and pulse programs must be used.
- These capacitors can be used for series impedance application in case safety approvals are requested.
- The maximum ambient temperature must not exceed 100 °C.
- Rated voltage pulse slope:
If the pulse voltage is lower than the rated voltage, the values of the specific reference data can be multiplied by 620 V (DC) and divided by the applied voltage.



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.