

# AC-Capacitors, Suppression Capacitors Class X2 AC 275V (Code pos. 9 = 2) (MKP)

## REFERENCE STANDARDS:

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

## DIELECTRIC:

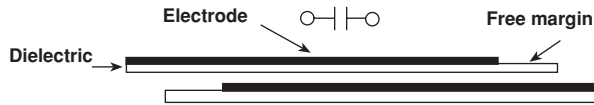
Polypropylene film

## ELECTRODES:

Metal evaporated

## CONSTRUCTION:

Metallized film capacitor, single design



## RATED VOLTAGE:

AC 275V, 50/60Hz

## PERMISSIBLE DC VOLTAGE:

DC 630V

## COATING:

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

## CLIMATIC TESTING CLASS ACC. TO EN 60068-1:

40/100/56

## TEST VOLTAGE:

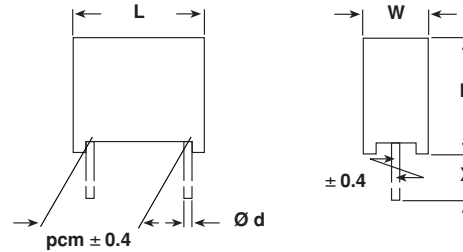
(Electrode/electrode): DC 2150V/2 sec.

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

## APPROVALS

COUNTRY	SPECIFICATION	ELECTRICAL VALUES	APPROVAL REFERENCE	APPROVAL MARK
U.S.A. (for AC 250V)	UL 1283	0.01 - 2.2 $\mu$ FX	E 76 297	
	UL 1414	0.01 - 1.0 $\mu$ FX	E 100 682	
Canada (for AC 250V)	C 22.2 No. 8-M 1986	0.01 - 2.2 $\mu$ FX	1114383	
	C 22.2 No. 1-M 1994	0.01 - 1.0 $\mu$ FX	E 100 682	
<b>CB TEST-CERTIFICATE (for AC 275V)</b>		0.01 - 2.2 $\mu$ FX2	DE-1-12510	
Germany	EN 132 400; 1999	0.01 - 2.2 $\mu$ FX2	40000787	
	IEC 60384-14, 2nd edition; 1995	3.3 - 4.7 $\mu$ FX2	pending	

Dimensions in mm



## CAPACITANCE RANGE:

E12 series 0.01 $\mu$ FX2 - 2.2 $\mu$ FX2  
preferred values acc. to E6

## CAPACITANCE TOLERANCE:

Standard:  $\pm 20\%$  /  $\pm 10\%$

## TERMINALS:

Radial tinned copper wire

## DISSIPATION FACTOR TAN $\delta$ :

< 0.1% measured at 1kHz

## INSULATION RESISTANCE: FOR C $\leq$ 0.33 $\mu$ F:

30 G $\Omega$  average value

15 G $\Omega$  minimum value

## TIME CONSTANT FOR C > 0.33 $\mu$ F:

10 000 sec. average value

5 000 sec. minimum value

## MAXIMUM PULSE RISE TIME: ( $d_u/d_t$ ) in V/ $\mu$ s

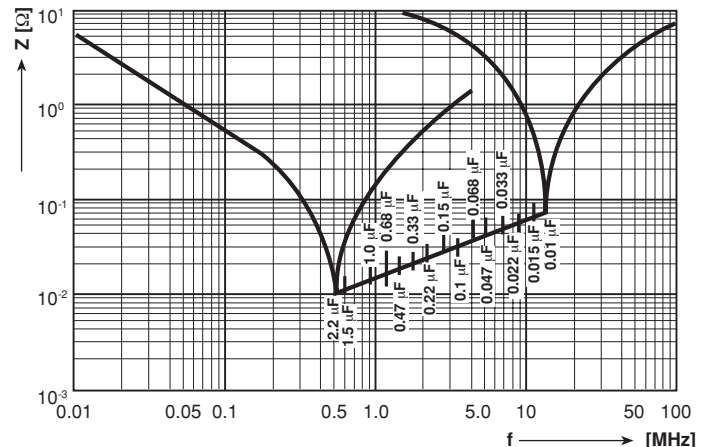
RATED VOLTAGE	PITCH (mm)			
	10.0	15.0	22.5	27.5 / 37.5
AC 275V	200	200	150	100

## FURTHER TECHNICAL DATA:

See page 21 (Document No 26504)

Impedance (Z) as a function of frequency (f)  
at  $T_a = 20^\circ\text{C}$  (average).

Measurement with lead length 6mm.



# Suppression Capacitors Class X2 AC 275V

V

PCM (mm)	PITCH CODE Pos. 10	TERMINAL $\phi$ d (mm)
10	D	0.6
15	F	0.8
22.5	I	0.8
27.5	K	0.8
37.5	P	0.8

LEAD LENGTH		ORDERING CODE**					
X (mm)	CODE POS.11	1-4	5-7	8	9	10	11-13
4 <sup>-1</sup>	B	1778	...	.	2	.	B.0
5 <sup>-1</sup>	M	1778	...	.	2	.	M.0
6 <sup>-1</sup>	C	1778	...	.	2	.	C.0
10 <sup>-1</sup>	E	1778	...	.	2	.	E B 0
15 <sup>-1</sup>	D	1778	...	.	2	.	D B 0
20 <sup>+5</sup>	H	1778	...	.	2	.	H B 0
30 <sup>+5</sup>	L	1778	...	.	2	.	L B 0

CAPACITANCE CODE POS. 5-7	TOL. CODE POS. 8 J = $\pm$ 5% K = $\pm$ 10% M = $\pm$ 20%	PITCH		BOX NO.	DIMENSIONS W x H x L (mm) (+ 0.2/- 0.4mm)	WEIGHT (Lead Length $\leq$ 6 <sup>-1</sup> mm) (g)	QUANTITY PACKAGE (Lead Length $\leq$ 6 <sup>-1</sup> mm) (pcs)*	ORDERING CODE**						
		(mm)	CODE POS. 10					TYPE 1-4	C VALUE 5-7	TOL. 8	VOLTAGE 9	PITCH 10	LEAD LENGTH DESIGN 11-13	
<b>Pitch 10mm</b>														
0.01	$\mu$ FX2	K/M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1778	310	.	2	D	.B0
0.012	$\mu$ FX2	K	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1778	312	K	2	D	.B0
0.015	$\mu$ FX2	K/M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1778	315	K	2	D	.B0
0.018	$\mu$ FX2	K	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1778	318	K	2	D	.B0
0.022	$\mu$ FX2	K/M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1778	322	.	2	D	.B0
0.027	$\mu$ FX2	K	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1778	327	K	2	D	.B0
0.033	$\mu$ FX2	K/M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1778	333	.	2	D	.B0
0.039	$\mu$ FX2	K	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1778	339	K	2	D	.B0
0.047	$\mu$ FX2	M	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1778	347	M	2	D	.B0
0.047	$\mu$ FX2	K	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1778	347	K	2	D	.B0
0.068	$\mu$ FX2	M	10.0	D	91	6.4 x 12.5 x 12.8	1.5	750	1778	368	M	2	D	.B0
0.1	$\mu$ FX2	M	10.0	D	91	6.4 x 12.5 x 12.8	1.4	750	1778	410	M	2	D	.B0
<b>Pitch 15mm</b>														
0.022	$\mu$ FX2	K/M	15	F	05	5.3 x 10.3 x 17.8	0.8	750	1778	322	.	2	F	.B0
0.033	$\mu$ FX2	K/M	15	F	05	5.3 x 10.3 x 17.8	0.8	750	1778	333	.	2	F	.B0
0.047	$\mu$ FX2	K/M	15.0	F	05	5.3 x 10.3 x 17.8	1.0	750	1778	347	.	2	F	.B0
0.056	$\mu$ FX2	K	15.0	F	05	5.3 x 10.3 x 17.8	1.4	750	1778	356	K	2	F	.B0
0.068	$\mu$ FX2	K	15.0	F	49	6.0 x 12.0 x 17.9	2.0	600	1778	368	K	2	F	.B0
0.068	$\mu$ FX2	M	15.0	F	05	5.3 x 10.3 x 17.8	1.5	750	1778	368	M	2	F	.B0
0.082	$\mu$ FX2	K	15.0	F	49	6.0 x 12.0 x 17.9	2.0	600	1778	382	K	2	F	.B0
0.1	$\mu$ FX2	K/M	15.0	F	49	6.0 x 12.0 x 17.9	2.0	600	1778	410	.	2	F	.B0
0.12	$\mu$ FX2	K	15.0	F	07	7.3 x 13.3 x 17.8	2.4	450	1778	412	K	2	F	.B0
0.15	$\mu$ FX2	K/M	15.0	F	07	7.3 x 13.3 x 17.8	2.4	450	1778	415	.	2	F	.B0
0.18	$\mu$ FX2	K	15.0	F	28	8.3 x 17.3 x 17.8	3.5	300	1778	418	K	2	F	.0
0.22	$\mu$ FX2	K	15.0	F	28	8.3 x 17.3 x 17.8	3.5	300	1778	422	K	2	F	.0
0.22	$\mu$ FX2	M	15.0	F	08	8.3 x 14.3 x 17.8	3.3	300	1778	422	M	2	F	.0
0.33	$\mu$ FX2	K	15.0	F	35	10.3 x 17.3 x 17.9	6.5	225	1778	433	K	2	F	.0
0.33	$\mu$ FX2	M	15.0	F	46	10.0 x 16.0 x 17.9	6.2	240	1778	433	M	2	F	.0
0.39	$\mu$ FX2	K	15.0	F	70	10.8 x 18.3 x 17.8	7.0	225	1778	439	K	2	F	.0
0.47	$\mu$ FX2	K/M	15.0	F	70	10.8 x 18.3 x 17.8	7.0	225	1778	447	M	2	F	.0
<b>Pitch 22.5mm</b>														
0.15	$\mu$ FX2	K/M	22.5	I	09	6.3 x 14.3 x 26.3	3.3	260	1778	415	.	2	I	.0
0.22	$\mu$ FX2	K	22.5	I	11	7.3 x 15.3 x 26.3	4.1	235	1778	422	K	2	I	.0
0.22	$\mu$ FX2	M	22.5	I	09	6.3 x 14.3 x 26.3	3.4	260	1778	422	M	2	I	.0
0.27	$\mu$ FX2	K	22.5	I	12	8.3 x 16.3 x 26.3	4.6	200	1778	427	K	2	I	.0
0.33	$\mu$ FX2	K/M	22.5	I	12	8.3 x 16.3 x 26.3	5.0	200	1778	433	.	2	I	.0
0.39	$\mu$ FX2	K	22.5	I	12	8.3 x 16.3 x 26.3	5.0	200	1778	439	K	2	I	.0
0.47	$\mu$ FX2	K/M	22.5	I	01	8.8 x 16.8 x 26.3	5.7	190	1778	447	.	2	I	.0
0.68	$\mu$ FX2	K/M	22.5	I	45	10.8 x 20.8 x 26.3	8.0	150	1778	468	.	2	I	.0
1.0	$\mu$ FX2	M	22.5	I	25	12.3 x 22.3 x 26.3	10.0	125	1778	510	M	2	I	.0

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

\* Further information about packaging quantities with different lead length and/or taped versions see Document No 26535 (Packing Quantities)

See page 16 - use Box No. as reference

B0 = Bulk Pack

\*\* These capacitors can be delivered on continuous tape and reel - see page 14/15 (Document No. 26535).

T0 = Tray/Pallet

CAPACITANCE CODE POS. 5-7	TOL. CODE POS. 8 J = ± 5% K = ± 10% M = ± 20%	PITCH		BOX NO.	DIMENSIONS W x H x L (mm) (+ 0.2/- 0.4mm)	WEIGHT (Lead Length ≤ 6 <sup>1</sup> mm) (g)	QUANTITY PACKAGE (Lead Length ≤ 6 <sup>1</sup> mm) (pcs)*	ORDERING CODE**						
		(mm)	CODE POS. 10					TYPE 1-4	C- VALUE 5-7	TOL. 8	Ø VOLTAGE 10	PITCH LEAD LENGTH DESIGN 11-13		
<b>Pitch 27.5mm</b>														
0.47	μFX2	K/M	27.5	K	23	8.8 x 16.8 x 31.3	6.8	160	1778	447	.	2	K	.. 0
0.56	μFX2	K	27.5	K	29	8.8 x 18.3 x 31.3	7.0	160	1778	456	K	2	K	.. 0
0.68	μFX2	K/M	27.5	K	14	11.0 x 20.3 x 31.3	9.1	125	1778	468	.	2	K	.. 0
0.82	μFX2	K	27.5	K	14	11.0 x 20.3 x 31.3	9.1	125	1778	482	K	2	K	.. 0
1.0	μFX2	K	27.5	K	15	13.0 x 23.3 x 31.3	10.9	110	1778	510	K	2	K	.. 0
1.0	μFX2	M	27.5	K	14	11.0 x 20.3 x 31.3	9.1	125	1778	510	M	2	K	.. 0
1.2	μFX2	K	27.5	K	15	13.0 x 23.3 x 31.3	12.9	110	1778	512	K	2	K	.. 0
1.5	μFX2	K/M	27.5	K	18	14.5 x 24.3 x 31.3	15.0	100	1778	515	.	2	K	.. 0
1.8	μFX2	K	27.5	K	40	17.8 x 32.3 x 31.3	24.4	80	1778	518	K	2	K	.. 0
2.2	μFX2	K	27.5	K	40	17.8 x 32.3 x 31.3	24.4	80	1778	522	K	2	K	.. 0
2.2	μFX2	M	27.5	K	17	16.3 x 29.3 x 31.3	20.0	85	1778	522	M	2	K	.. 0
3.3	μFX2	K	27.5	K	41	19.5 x 34.5 x 31.3	29.8	70	1778	533	K	2	K	.. 0
3.3	μFX2	M	27.5	K	40	17.8 x 32.3 x 31.3	27.8	80	1778	533	M	2	K	.. 0
<b>Pitch 37.5mm</b>														
3.3	μFX2	M	37.5	P	19	15.5 x 28.3 x 41.3	25.0	70	1778	533	M	2	P	.. 0
4.7	μFX2	M	37.5	P	20	17.8 x 32.3 x 41.3	31.6	60	1778	547	M	2	P	.. 0

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