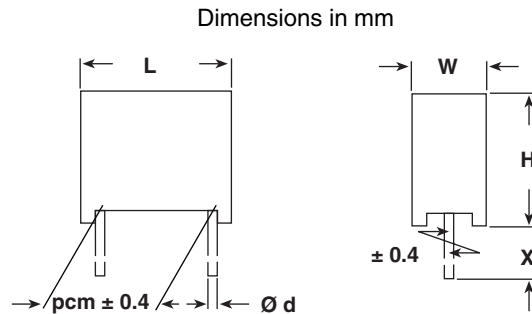


AC-Capacitors, Suppression Capacitors Class Y2 (X1) AC 305 V (MKT)


FEATURES:

Product is completely lead (Pb)-free
Product is RoHS compliant


REFERENCE STANDARDS:

EN/IEC 60068; IEC 60384-14/2 1993/07
UL 1414; CSA C22 2 No. 1-M 1994



DIELECTRIC: Polyester film

ELECTRODES: Metal evaporated

**RoHS
COMPLIANT**

RATED VOLTAGE: AC 305 V; 50/60 Hz

PERMISSIBLE DC VOLTAGE: DC 1000 V

CAPACITANCE RANGE:

E12 series 1000 pFY2 - 0.1 μ FY2 (X1) preferred values acc. to E6

CAPACITANCE TOLERANCE:

Standard $\pm 20\%$; on request $\pm 10\%$ and $\pm 5\%$

TERMINALS:

Radial tinned copper wire

COATING:

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

CLIMATIC TESTING CLASS ACC. TO EN/IEC 60068-1

40/105/56

TEST VOLTAGE:

(Electrode/electrode): DC 5000 V for 1 sec. at 25 °C;
Between interconnected terminations and case (foil method);
AC 2500 V for 2 sec. at 25 °C

DISSIPATION FACTOR TAND: < 1 % measured at 1 kHz

INSULATION RESISTANCE:

30 G Ω average value
15 G Ω average value

FURTHER TECHNICAL DATA:

See page 71 (Document Number 26525)

LEAD LENGTH		ORDERING CODE** (see page 49 - Document No. 26511)					
(X) (mm)	Code Pos.11	1-4	5-7	8	9	10	11-13
4 ⁻¹	B	1710	...	.	3	.	B . 0
6 ⁻¹	C	1710	...	.	3	.	C . 0
15 ⁻¹	D	1710	...	.	3	.	D . 0
30 ⁺⁵	L	1710	...	.	3	.	L . 0

pcm (mm)	Pitch Code Pos. 10	Terminal Ø d (mm)
10	D	0.6
> 10	F, I or K	0.8

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

RATED VOLTAGE	PITCH (mm)		
	10.0/15.0	22.5	27.5
AC 305 V	200	150	100

CAPACITANCE Code Pos 5-7 (as class Y2 and X1)	TOLERANCE Code Pos 8 J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	PITCH		BOX NO	DIMENSIONS W x H x L (mm) ^{+0.2 / -0.4 mm}	WEIGHT (Lead Length 6 ⁻¹ mm) (g)	QUANTITY PACKAGE (Lead Length) ≤ 6 ⁻¹ mm) (pcs)*	ORDERING CODE**						
		(mm)	Code Pos. 10					TYPE	C-Value	Tolerance	Voltage	Pitch	Lead Length Design	
														1-4	5-7	8	9	10	11-13
1000 pF	M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1710	210	M	3	D	.	B0
1200 pF	M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1710	212	M	3	D	.	B0
1500 pF	M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1710	215	M	3	D	.	B0
1800 pF	M	10.0	D	32	3.8 x 8.8 x 12.8	0.6	1500	1710	218	M	3	D	.	B0
2200 pF	M	10.0	D	02	4.3 x 9.3 x 12.8	0.8	1250	1710	222	M	3	D	.	B0
2700 pF	M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1710	227	M	3	D	.	B0
3300 pF	M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1710	233	M	3	D	.	B0
3900 pF	M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1710	239	M	3	D	.	B0
4700 pF	M	10.0	D	03	5.3 x 10.3 x 12.8	1.0	1000	1710	247	M	3	D	.	B0
5600 pF	M	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1710	256	M	3	D	.	B0
6800 pF	M	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1710	268	M	3	D	.	B0
8200 pF	M	10.0	D	04	6.3 x 11.3 x 12.8	1.3	750	1710	282	M	3	D	.	B0
0.010 µF	M	10.0	D	91	6.3 x 12.3 x 12.8	1.3	750	1710	310	M	3	D	.	B0

* Further information about packaging quantities with different lead length and/or taped versions.
See page 16 (Document No 27608 Packaging Quantities). Use Box No. as reference

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

Ordering example: 1710-210 M 2 D CB0

B0 = Bulk Pack T0 = Tray/Pallet



CAPACITANCE Code Pos 5-7 (as class Y2 and X1)	TOLERANCE Code Pos 8 J = ± 5 % K = ± 10 % M = ± 20 %	PITCH		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**					
		(mm)	Code Pos. 10					TYPE	C-Value	Tolerance	Voltage	Pitch	Lead Length Design
1000 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	210	M	3	F	.BO
1200 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	212	M	3	F	.BO
1500 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	215	M	3	F	.BO
1800 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	218	M	3	F	.BO
2200 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	222	M	3	F	.BO
2700 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	227	M	3	F	.BO
3300 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	233	M	3	F	.BO
3900 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	239	M	3	F	.BO
4700 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	247	M	3	F	.BO
5600 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	256	M	3	F	.BO
6800 pF	M	15	F	05	5.3 x 10.3 x 17.8	1.4	750	1710	268	M	3	F	.BO
8200 pF	M	15	F	06	6.3 x 12.3 x 17.8	2.0	500	1710	282	M	3	F	.BO
0.01 µF	M	15	F	06	6.3 x 12.3 x 17.8	2.0	500	1710	310	M	3	F	.BO
0.012 µF	M	15	F	07	7.3 x 13.3 x 17.8	2.4	450	1710	312	M	3	F	.BO
0.015 µF	M	15	F	07	7.3 x 13.3 x 17.8	2.4	450	1710	315	M	3	F	.BO
0.018 µF	M	15	F	28	8.3 x 17.3 x 17.8	3.4	300	1710	318	M	3	F	.BO
0.022 µF	M	15	F	28	8.3 x 17.3 x 17.8	3.4	300	1710	322	M	3	F	.BO
0.027 µF	M	22.5	I	09	6.3 x 14.3 x 26.3	3.5	260	1710	327	M	3	I	.0
0.033 µF	M	22.5	I	09	6.3 x 14.3 x 26.3	3.5	260	1710	333	M	3	I	.0
0.039 µF	M	22.5	I	11	7.3 x 15.3 x 26.3	3.9	235	1710	339	M	3	I	.0
0.047 µF	M	22.5	I	12	8.3 x 16.3 x 26.3	4.8	200	1710	347	M	3	I	.0
0.056 µF	M	22.5	I	13	10.3 x 18.3 x 26.3	6.6	170	1710	356	M	3	I	.0
0.068 µF	M	22.5	I	13	10.3 x 18.3 x 26.3	6.6	170	1710	368	M	3	I	.0
0.082 µF	M	27.5	K	14	11.0 x 20.3 x 31.3	9.4	125	1710	382	M	3	K	.0
0.1 µF	M	27.5	K	14	11.0 x 20.3 x 31.3	9.4	125	1710	410	M	3	K	.0

Preferred values in bold print.

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

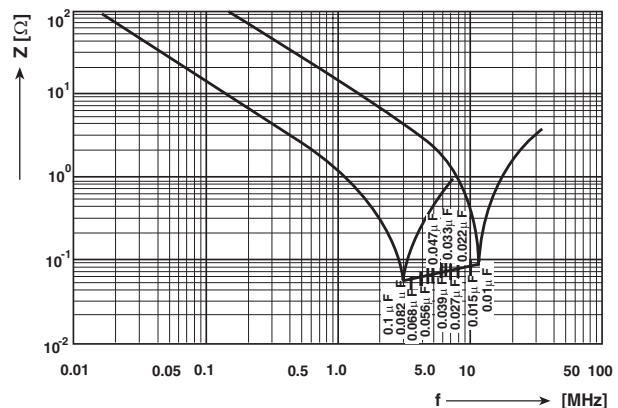
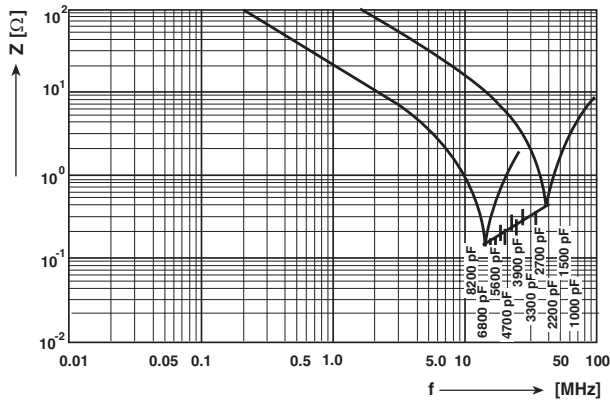
See page 16 (Document No 27608 Packing Quantities). Use Box No as reference

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

The ordering code is then: F1710-... M 3. 0R0 at H = 16.5 mm, F1710-... M 3. 0W0 at H = 18.5 mm.

APPROVALS

COUNTRY	SPECIFICATION	ELECTRICAL VALUES	APPROVAL REFERENCE	APPROVAL MARK
U.S.A. (for AC 250 V)	UL 1283 UL 1414	1000 pF Y - 0.1 µF Y 1000 pF Y - 0.1 µF Y	E 76297 E 100682	
Canada (for AC 250 V)	C 22.2 No. 1-M 1994	1000 pF Y 0.1 µF Y	LR 64546-7	
CB TEST-CERTIFICATE (for AC 305 V)		1000 pF - 0.1 µF Y2 (X1)	DE 1-10088	
Germany (for AC 305 V)	EN 132 400; 1999-06 IEC 60384-14, 2nd edition, 1995-06	1000 pF - 0.1 µF Y2 (X1)	136954L	



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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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 in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

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

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.