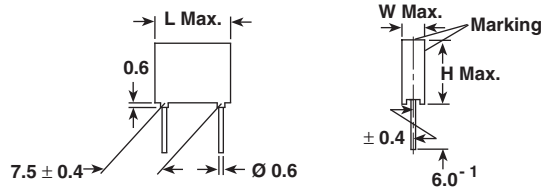


Metallized Polyester Film Capacitors

Related Document: IEC 60384-2

Dimensions in millimeters


MAIN APPLICATIONS

Blocking, bypassing, filtering and timing, high frequency coupling and decoupling. Interference suppression in low voltage applications.

MARKING

Manufacturer's logo/type/C-value/rated voltage/tolerance/date of manufacture

DIELECTRIC

Polyester film

ELECTRODES

Vacuum deposited aluminum

COATING

Flame retardant plastic case (UL-class 94 V-0), green, epoxy resin sealed

CONSTRUCTION

Extended metallized film (refer to general information)

LEADS

Tinned wire

IEC TEST CLASSIFICATION

55/100/56, according to IEC 60068

OPERATING TEMPERATURE RANGE

- 55°C to + 100°C

CAPACITANCE RANGE

1000pF to 1.0µF

CAPACITANCE TOLERANCES

± 20% (M), ± 10% (K), ± 5% (J)

MAXIMUM PULSE RISE TIME

PCM (mm)	Maximum Pulse Rise Time d_v/d_t [V/µs]				
	63 VDC	100 VDC	250 VDC	400 VDC	630 VDC
7.5	12	20	32	41	70

If the maximum pulse voltage is less than the rated voltage higher d_v/d_t values can be permitted.

DISSIPATION FACTOR TAN δ

MEASURED AT	$C \leq 0.1\mu F$	$0.1\mu F < C \leq 1.0\mu F$
1kHz	8×10^{-3}	8×10^{-3}
10kHz	15×10^{-3}	15×10^{-3}
100kHz	25×10^{-3}	—
Maximum values		

FEATURES

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


RATED VOLTAGES (U_R):

63 VDC, 100 VDC, 250 VDC, 400 VDC, 630 VDC


PERMISSIBLE AC VOLTAGES (RMS) UP TO 60Hz

40 VAC, 63 VAC, 160 VAC, 200 VAC, 220 VAC

RoHS
COMPLIANT

TEST VOLTAGE (ELECTRODE/ELECTRODE)

$1.6 \times U_R$ for 2 s

INSULATION RESISTANCE

Measured with 100 VDC (63 VDC series at 50 VDC) after one minute

For $C \leq 0.33\mu F$ and $U_R > 100$ VDC:

30,000 MΩ minimum value (100,000 MΩ typical value)

For $C \leq 0.33\mu F$ and $U_R \leq 100$ VDC:

15,000 MΩ minimum value (50,000 MΩ typical value)

TIME CONSTANT

Measured at 100 VDC (63 VDC series measured at 50 VDC) after one minute

For $C > 0.33\mu F$ and $U_R \leq 100$ VDC:

5000 s minimum value (15,000 s typical value)

CAPACITANCE DRIFT

Up to + 40°C, ± 1.5% for a period of two years

DERATING FOR DC AND AC. CATEGORY VOLTAGE U_C

At + 85°C: $U_C = 1.0 U_R$

At + 100°C: $U_C = 0.8 U_R$

SELF INDUCTANCE

~ 6nH measured with 2mm long leads

PULL TEST ON LEADS

≥ 30 N in direction of leads according to IEC 60068-2-21

RELIABILITY

Operational life > 300,000 hz

Failure rate < 2 FIT (40°C and $0.5 \times U_R$)

For further details, please refer to the general information available at www.vishay.com/doc?26033.



CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 06 63 VDC/ 40 VAC			VOLTAGE CODE 01 100 VDC/ 63 VAC			VOLTAGE CODE 25 250 VDC/ 160 VAC			VOLTAGE CODE 40 400 VDC/ 200 VAC			VOLTAGE CODE 63* 630 VDC/ 220 VAC		
		W	H	L	W	H	L	W	H	L	W	H	L	W	H	L
1000pF	- 210	—	—	—	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0
1500pF	- 215	—	—	—	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0
2200pF	- 222	—	—	—	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0
3300pF	- 233	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0	3.0	8.5	10.0
4700pF	- 247	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0	—	—	—
6800pF	- 268	—	—	—	—	—	—	—	—	—	2.5	7.5	10.0	—	—	—
0.01μF	- 310	—	—	—	—	—	—	2.5	7.5	10.0	3.0	8.5	10.0	—	—	—
0.015μF	- 315	—	—	—	—	—	—	2.5	7.5	10.0	—	—	—	—	—	—
0.022μF	- 322	—	—	—	2.5	7.5	10.0	3.0	8.5	10.0	—	—	—	—	—	—
0.033μF	- 333	—	—	—	2.5	7.5	10.0	3.0	8.5	10.0	—	—	—	—	—	—
0.047μF	- 347	—	—	—	2.5	7.5	10.0	4.0	9.0	10.0	—	—	—	—	—	—
0.068μF	- 368	—	—	—	2.5	7.5	10.0	4.5	9.5	10.0	—	—	—	—	—	—
0.1μF	- 410	2.5	7.5	10.0	3.0	8.5	10.0	5.0	10.5	10.3	—	—	—	—	—	—
0.15μF	- 415	2.5	7.5	10.0	3.0	8.5	10.0	—	—	—	—	—	—	—	—	—
0.22μF	- 422	3.0	8.5	10.0	4.0	9.0	10.0	—	—	—	—	—	—	—	—	—
0.33μF	- 433	4.0	9.0	10.0	5.0	10.5	10.3	—	—	—	—	—	—	—	—	—
0.47μF	- 447	4.5	9.5	10.0	5.7	11.5	10.3	—	—	—	—	—	—	—	—	—
0.68μF	- 468	5.0	10.5	10.3	—	—	—	—	—	—	—	—	—	—	—	—
1.0μF	- 510	5.7	11.5	10.3	—	—	—	—	—	—	—	—	—	—	—	—

Further values upon request.

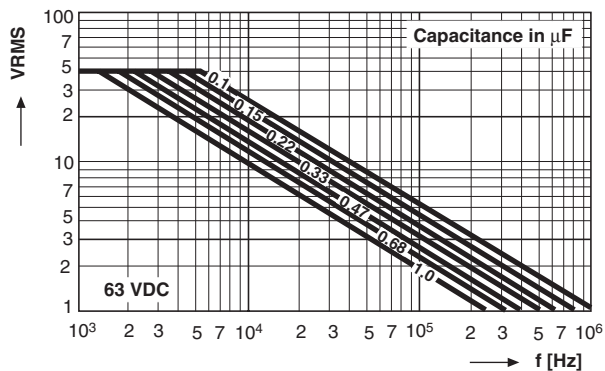
*Not suitable for mains applications.

Please refer to X-capacitors in our catalog "RFI Suppression Components".

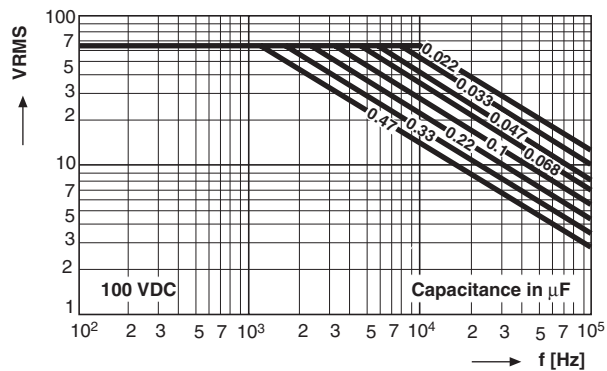
RECOMMENDED PACKAGING

LETTER CODE	TYPE OF PACKAGING	HEIGHT (H) (mm)	REEL DIAMETER (mm)	ORDERING CODE EXAMPLE	PCM 7.5
D	AMMO	16.5	S*	MKT 1818-310-255-D	X
G	AMMO	18.5	S*	MKT 1818-310-255-G	X
F	REEL	16.5	350	MKT 1818-310-255-F	X
W	REEL	18.5	350	MKT 1818-310-255-W	X
—	BULK	—	—	MKT 1818-310-255	X

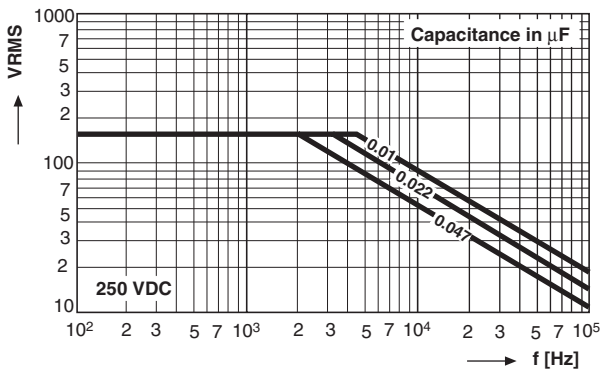
*S = box size 55 x 210 x 340mm (W x H x L)



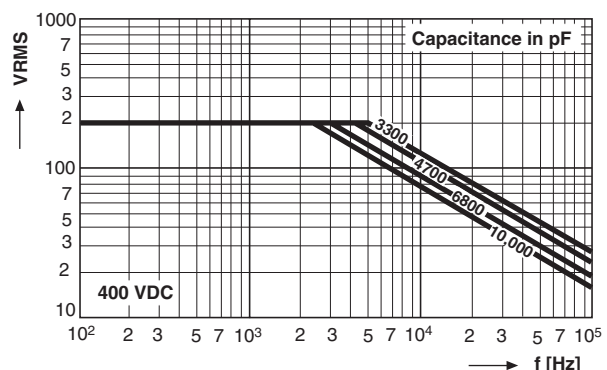
Permissible AC Voltage versus Frequency



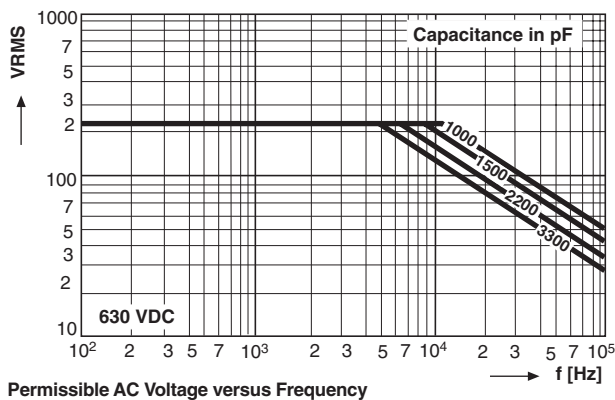
Permissible AC Voltage versus Frequency



Permissible AC Voltage versus Frequency



Permissible AC Voltage versus Frequency



Permissible AC Voltage versus Frequency



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.