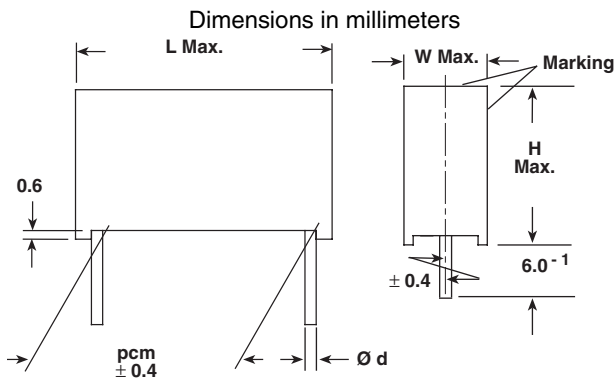


Metallized Polypropylene Film Capacitor

Related Document: IEC 60384-16



W	Ø d
< 16.0	0.8
≥ 16.0	1.0

MAIN APPLICATIONS

High voltage, high current and high pulse operations, deflection circuits in TV sets (S-correction and fly-back tuning). Protection circuits in SMPS's. Snubber and electronic ballast circuits. Input and output filtering in SPS designs, storage, timing and integrating circuits.

MARKING

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

DIELECTRIC

Polypropylene film

ELECTRODES

Vacuum deposited aluminum

COATING

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

CONSTRUCTION

Extended double-sided metallized polyester film, internal series connection, single-sided metallized polypropylene film (refer to general information)

LEADS

Tinned wire

IEC TEST CLASSIFICATION

55/100/56, according to IEC 60068

MAXIMUM PULSE RISE TIME

PCM (mm)	Maximum Pulse Rise Time d_v/d_t [V/μs]			
	630 VDC	1000 VDC	1600 VDC	2000 VDC
15	3430	6600	11100	—
22.5	2120	2800	3800	6200
27.5	1524	2000	2680	4200
37.5	980	1280	1690	2600

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

FEATURES

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

OPERATING TEMPERATURE RANGE

- 55°C to + 100°C

CAPACITANCE RANGE

1000pF to 0.68μF

CAPACITANCE TOLERANCES

± 20% (M), ± 10% (K), ± 5% (J)

RATED VOLTAGES (U_R):

630 VDC, 1000 VDC, 1600 VDC, 2000 VDC

PERMISSIBLE AC VOLTAGES (RMS) UP TO 60Hz

400 VAC, 600 VAC, 650 VAC, 700 VAC

TEST VOLTAGE (ELECTRODE/ELECTRODE)

1.6 x U_R for 2 s

INSULATION RESISTANCE

Measured at 100 VDC after one minute

For $C \leq 0.33\mu\text{F}$:

100,000 MΩ minimum value

TIME CONSTANT

Measured at 100 VDC after one minute

For $C > 0.33\mu\text{F}$:

30,000 s minimum value

TEMPERATURE COEFFICIENT

- 250 x 10⁻⁶/°C (typical value)

CAPACITANCE DRIFT

Up to + 40°C, ± 0.5% 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: $U_C = 0.7 U_R$

SELF INDUCTANCE

~ 6 nH 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 h

Failure rate < 5 FIT (40°C and 0.5 x U_R)

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



RoHS
COMPLIANT



DISSIPATION FACTOR TAN δ

MEASURED AT	$C \leq 0.1\mu\text{F}$	$0.1\mu\text{F} < C \leq 1.0\mu\text{F}$
1kHz	0.3×10^{-3}	0.3×10^{-3}
10kHz	0.4×10^{-3}	0.4×10^{-3}
100kHz	1.5×10^{-3}	—
Maximum values		

CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 63 630 VDC/400 VAC				VOLTAGE CODE 10 1000 VDC/600 VAC				VOLTAGE CODE 13 1600 VDC/650 VAC				VOLTAGE CODE 20 2000 VDC/700 VAC			
		W	H	L	PCM	W	H	L	PCM	W	H	L	PCM	W	H	L	PCM
1000pF	- 210	—	—	—	—	—	—	—	—	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
1500pF	- 215	—	—	—	—	—	—	—	—	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
2200pF	- 222	—	—	—	—	—	—	—	—	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5
3300pF	- 233	—	—	—	—	5.5	10.5	18.0	15	6.5	12.5	18.0	15	6.5	14.5	26.5	22.5
4700pF	- 247	—	—	—	—	5.5	10.5	18.0	15	7.5	13.5	18.0	15	6.5	14.5	26.5	22.5
6800pF	- 268	5.5	10.5	18.0	15	6.5	12.5	18.0	15	8.5	14.5	18.0	15	7.5	15.5	26.5	22.5
0.01 μF	- 310	5.5	10.5	18.0	15	6.5	14.5	26.5	22.5	6.5	14.5	26.5	22.5	8.5	16.5	26.5	22.5
0.015 μF	- 315	6.5	12.5	18.0	15	6.5	14.5	26.5	22.5	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5
0.022 μF	- 322	7.5	13.5	18.0	15	6.5	14.5	26.5	22.5	8.5	16.5	26.5	22.5	11.5	20.5	31.5	27.5
0.033 μF	- 333	8.5	14.5	18.0	15	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5	13.5	23.5	31.5	27.5
0.047 μF	- 347	7.5	15.5	26.5	22.5	10.5	18.5	26.5	22.5	11.5	20.5	31.5	27.5	15.0	24.5	31.5	27.5
0.068 μF	- 368	8.5	16.5	26.5	22.5	11.0	21.0	26.5	22.5	11.5	20.5	31.5	27.5	16.5	29.5	31.5	27.5
0.1 μF	- 410	10.5	18.5	26.5	22.5	11.5	20.5	31.5	27.5	15.0	24.5	31.5	27.5	16.0	28.5	41.5	37.5
0.15 μF	- 415	11.5	20.5	31.5	27.5	13.5	23.5	31.5	27.5	14.5	24.5	41.5	37.5	—	—	—	—
0.22 μF	- 422	13.5	23.5	31.5	27.5	16.5	29.5	31.5	27.5	16.0	28.5	41.5	37.5	—	—	—	—
0.33 μF	- 433	15.0	24.5	31.5	27.5	—	—	—	—	—	—	—	—	—	—	—	—
0.47 μF	- 447	14.5	24.5	41.5	37.5	—	—	—	—	—	—	—	—	—	—	—	—
0.68 μF	- 468	18.0	32.5	41.5	37.5	—	—	—	—	—	—	—	—	—	—	—	—

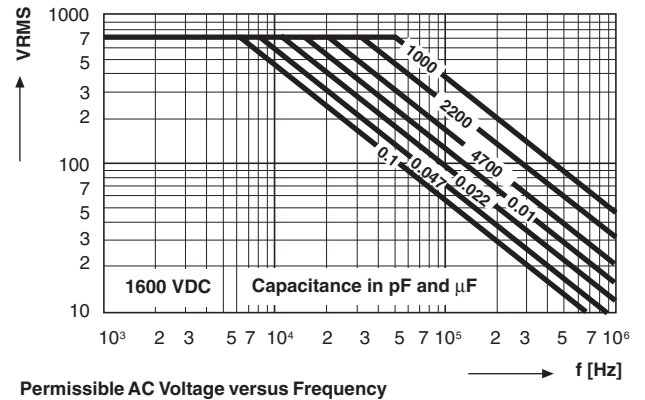
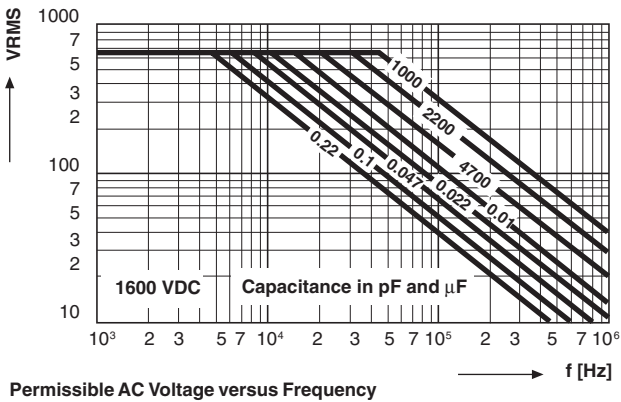
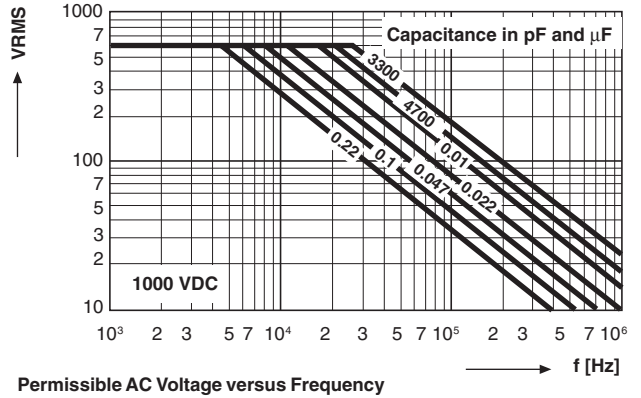
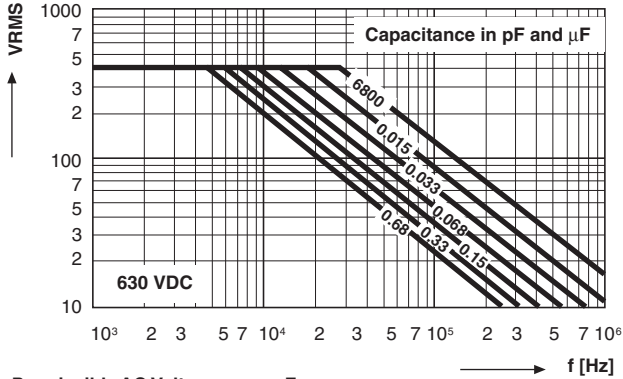
Further C-values upon request.

RECOMMENDED PACKAGING

LETTER CODE	TYPE OF PACKAGING	HEIGHT (H) (mm)	REEL DIAMETER (mm)	ORDERING CODE EXAMPLES	PCM 15	PCM 22.5 - 27.5	PCM 37.5
D	AMMO	16.5	S*	MKP 1846-310/635-D	X	—	—
G	AMMO	18.5	S*	MKP 1846-310/635-G	X	—	—
F	REEL	16.5	350	MKP 1846-310/635-F	X	—	—
W	REEL	18.5	350	MKP 1846-310/635-W	X	—	—
V	REEL	18.5	500	MKP 1846-410/105-V	X	X	—
G	AMMO	18.5	L*	MKP 1846-410/105-G	—	X	—
—	BULK	—	—	MKP 1846-422-135	X	X	X

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

*L = box size 60 x 360 x 510mm (W x H x L)





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.