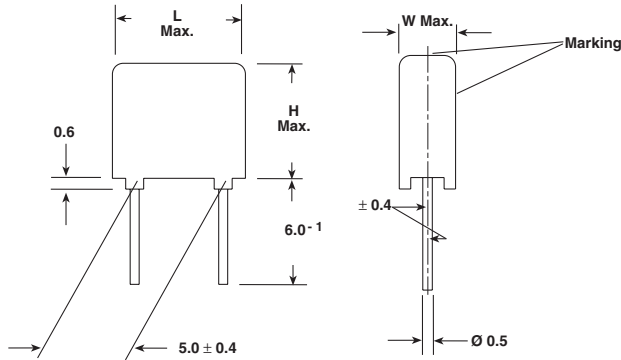


## Metallized Polyester Film Capacitors

### Related Document: IEC 60384-2

Dimensions in millimeters



#### MAIN APPLICATIONS

Blocking, bypassing, filtering and timing, high frequency coupling and decoupling for fast digital and analog ICs, 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

#### TEST VOLTAGE (ELECTRODE/ELECTRODE)

$1.6 \times U_R$  for 2 s

#### OPERATING TEMPERATURE RANGE

- 55°C to + 100°C

#### MAXIMUM PULSE RISE TIME

PCM (mm)	Maximum Pulse Rise Time $d_v/d_t$ [V/ $\mu$ s]			
	63 VDC	100 VDC	250 VDC	400 VDC
5	15	24	44	100

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

#### DISSIPATION FACTOR $\tan \delta$

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

#### FEATURES

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

#### CAPACITANCE RANGE

1000pF to 1.0 $\mu$ FF

#### CAPACITANCE TOLERANCES

$\pm 20\%$  (M),  $\pm 10\%$  (K),  $\pm 5\%$  (J)

#### RATED VOLTAGES (UR)

63 VDC, 100 VDC, 250 VDC, 400 VDC

#### PERMISSIBLE AC VOLTAGES (RMS) UP TO 60HZ

40 VAC, 63 VAC, 160 VAC, 200 VAC

#### INSULATION RESISTANCE

Measured with 100 VDC

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

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

7500 M $\Omega$  minimum value (100,000 M $\Omega$  typical value)

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

3750 M $\Omega$  minimum value (50,000 M $\Omega$  typical value)

#### TIME CONSTANT

Measured with 50 VDC after one minute

**For  $C > 0.33\mu F$ :**

1250 s minimum value (10,000 s typical value)

#### CAPACITANCE DRIFT

Up to + 40°C,  $\pm 1.5\%$  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

$\geq 30$  N in direction of leads according to IEC 60068-2-21

#### RELIABILITY

Operational life > 300,000h

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](http://www.vishay.com/doc?26033).



**RoHS**  
COMPLIANT

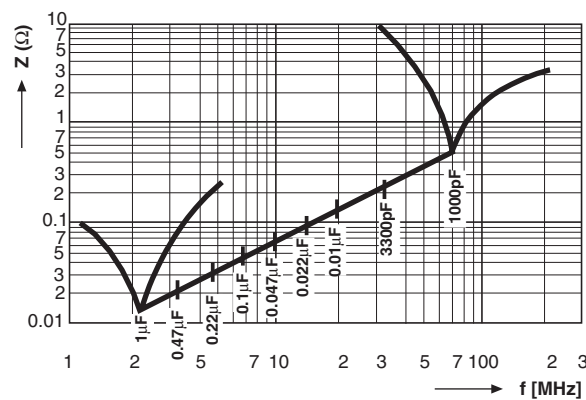
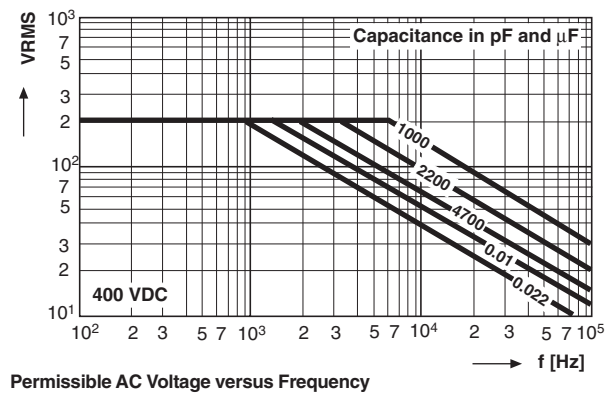
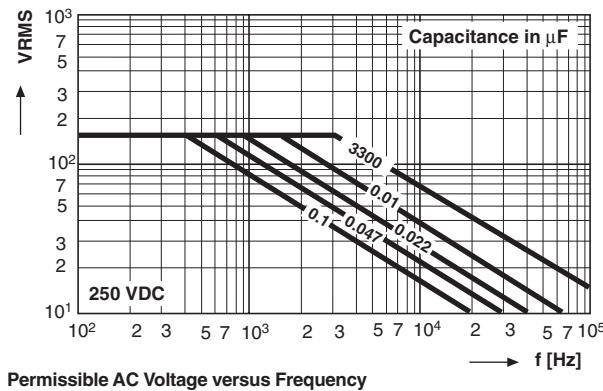
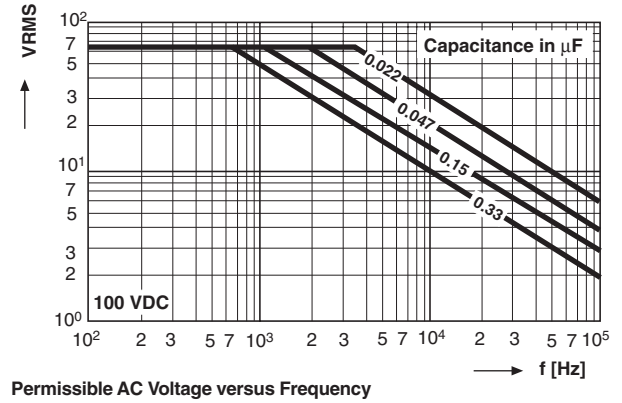
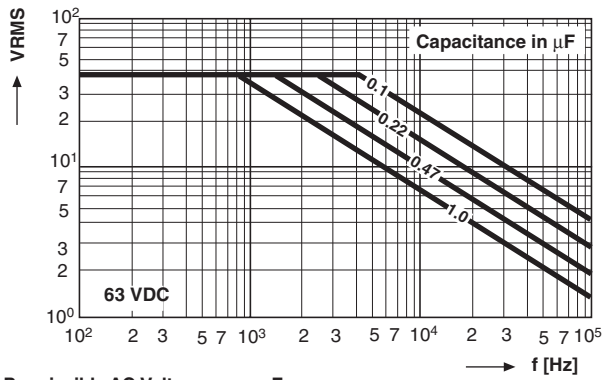
CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 06 63 VDC/40 VAC			VOLTAGE CODE 01 100 VDC/63 VAC			VOLTAGE CODE 25 250 VDC/160 VAC			VOLTAGE CODE 40 400 VDC/200 VAC		
		W	H	L	W	H	L	W	H	L	W	H	L
1000pF	- 210	—	—	—	—	—	—	—	—	—	2.5	6.0	7.5
1500pF	- 215	—	—	—	—	—	—	—	—	—	2.5	6.0	7.5
2200pF	- 222	—	—	—	—	—	—	—	—	—	2.5	6.0	7.5
3300pF	- 233	—	—	—	—	—	—	2.5	6.0	7.5	3.0	6.5	7.5
4700pF	- 247	—	—	—	—	—	—	2.5	6.0	7.5	3.5	8.5	7.5
6800pF	- 268	—	—	—	—	—	—	2.5	6.0	7.5	3.5	8.5	7.5
0.01μF	- 310	—	—	—	—	—	—	2.5	6.0	7.5	4.5	9.5	7.5
0.015μF	- 315	—	—	—	—	—	—	2.5	6.0	7.5	5.0	10.0	7.5
0.022μF	- 322	—	—	—	2.5	6.0	7.5	3.0	6.5	7.5	5.5	11.5	7.5
0.033μF	- 333	—	—	—	2.5	6.0	7.5	3.5	8.5	7.5	—	—	—
0.047μF	- 347	—	—	—	2.5	6.0	7.5	4.5	9.5	7.5	—	—	—
0.068μF	- 368	—	—	—	2.5	6.0	7.5	4.5	9.5	7.5	—	—	—
0.1μF	- 410	2.5	6.0	7.5	3.5	8.5	7.5	5.5	11.5	7.5	—	—	—
0.15μF	- 415	3.5	8.5	7.5	4.5	9.5	7.5	—	—	—	—	—	—
0.22μF	- 422	3.5	8.5	7.5	5.0	10.0	7.5	—	—	—	—	—	—
0.33μF	- 433	4.5	9.5	7.5	5.5	9.0	11.5	7.5	—	—	—	—	—
0.47μF	- 447	5.0	10.0	7.5	—	—	—	—	—	—	—	—	—
0.68μF	-468	5.0	10.5	7.5	—	—	—	—	—	—	—	—	—
1.0μF	- 510	5.5	11.5	7.5	—	—	—	—	—	—	—	—	—

Further values upon request. For C-values > 1.0μF please refer to type MKT 1826.

### RECOMMENDED PACKAGING

LETTER CODE	TYPE OF PACKAGING	HEIGHT (H) (mm)	REEL DIAMETER (mm)	ORDERING CODE EXAMPLES	PCM 5
D	AMMO	16.5	S*	MKT 1817-233-255-D	X
G	AMMO	18.5	S*	MKT 1817-233-255-G	X
F	REEL	16.5	350	MKT 1817-233-255-F	X
W	REEL	18.5	350	MKT 1817-233-255-W	X
—	BULK	—	—	MKT 1817-233-255	X

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





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