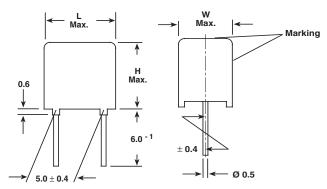


## Vishay Roederstein

# **Metallized Polypropylene Film Capacitor** Related Document: IEC 60384-16

Dimensions in millimeters



#### MAIN APPLICATIONS

Oscillator, timing and LC/RC filter circuits, high frequency coupling/decoupling, sample and hold 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 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**

 $0.01 \mu F$  to  $0.1 \mu F$ 

### CAPACITANCE DRIFT

Up to + 40°C, < 0.5% for a period of two years

# **FEATURES**

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



### **CAPACITANCE TOLERANCES**

 $\pm$  10% (K),  $\pm$  5% (J),  $\pm$  2.5% (H),  $\pm$  1% (F)



### RATED VOLTAGES (UR)

160 VDC

# PERMISSIBLE AC VOLTAGES (RMS) UP TO 60HZ

# TEST VOLTAGE (ELECTRODE/ELECTRODE)

 $1.6 \times U_{R}$  for  $2 \times U_{R}$ 

#### **INSULATION RESISTANCE**

Measured at 100 VDC after one minute 100,000 M $\Omega$  minimum value

#### **TEMPERATURE COEFFICIENT**

- 250°C x 10<sup>-6</sup>/°C (typical value)

#### **MAXIMUM PULSE RISE TIME**

 $dv/dt = 390 V/\mu s$ 

If the maximum pulse voltage is less than the rated voltage, higher dv/dt values can be permitted.

### DERATING FOR DC AND AC.CATEGORY VOLTAGE UC

At +  $85^{\circ}$ C:  $U_{C} = 1.0 U_{R}$ At + 100°C:  $U_C = 0.7 U_B$ 

#### **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

### **DIELECTRIC ABSORPTION**

0.05% (typical value) acc. to IEC 60384-1

#### RELIABILITY

Operational life > 300,000 h Failure rate < 5 FIT (40°C and 0.5 x U<sub>B</sub>)

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

#### DISSIPATION FACTOR TAN $\delta$

MEASURED AT	C ≤ 0.1µF			
1kHz	0.4 x 10 <sup>-3</sup>			
10kHz	0.6 x 10 <sup>-3</sup>			
100kHz	4 x 10 <sup>-3</sup>			
Maximum values				

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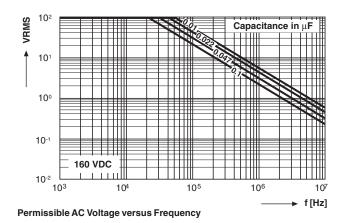


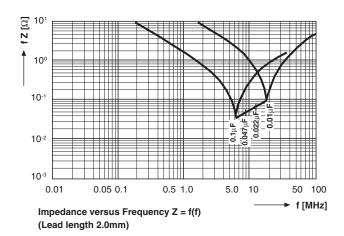
CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 16 160 VDC/100 VAC		
		W	Н	L
0.01μF	- 310	5.5	7.0	7.5
0.015μF	- 315	5.5	7.0	7.5
0.022μF	- 322	5.5	7.0	7.5
0.033μF	- 333	7.5	9.0	7.5
0.047μF	- 347	7.5	9.0	7.5
0.068μF	- 368	7.5	9.0	7.5
0.1μF	- 410	9.0	11.0	7.5

Further C-values upon request

### **RECOMMENDED PACKAGING**

LETTER CODE	TYPE OF PACKAGING	HEIGHT (H) (mm)	REEL DIAMETER (mm)	ORDERING CODE EXAMPLES	PCM 5
D	АММО	16.5	S*	MKP 1837-322-162-D	Х
G	AMMO	18.5	S*	MKP 1837-322-162-G	Х
F	REEL	16.5	350	MKP 1837-322-162-F	Х
W	REEL	18.5	350	MKP 1837-322-162-W	Х
_	BULK	_	_	MKP 1837-322-162	Х







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