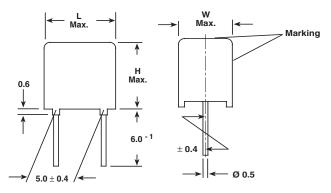


Vishay Roederstein

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 x U_R for 2 s

INSULATION RESISTANCE

Measured at 100 VDC after one minute 100,000 M Ω minimum value

TEMPERATURE COEFFICIENT

- 250°C x 10⁻⁶/°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° 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_B)

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

DISSIPATION FACTOR TAN δ

| MEASURED AT | C ≤ 0.1µF | | | |
|----------------|------------------------|--|--|--|
| 1kHz | 0.4 x 10 ⁻³ | | | |
| 10kHz | 0.6 x 10 ⁻³ | | | |
| 100kHz | 4 x 10 ⁻³ | | | |
| Maximum values | | | | |

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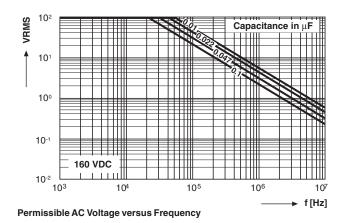


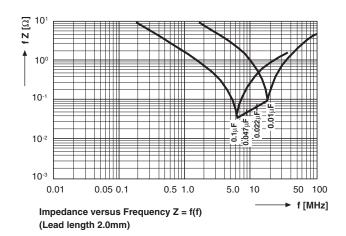
| CAPACITANCE | CAPACITANCE CODE | VOLTAGE CODE 16 160 VDC/100 VAC | | |
|-------------|---------------------|---------------------------------------|------|-----|
| | | W | Н | L |
| 0.01μF | - 310 | 5.5 | 7.0 | 7.5 |
| 0.015μF | - 315 | 5.5 | 7.0 | 7.5 |
| 0.022μF | - 322 | 5.5 | 7.0 | 7.5 |
| 0.033μF | - 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 | AMMO | 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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Revision: 02-Oct-12 Document Number: 91000