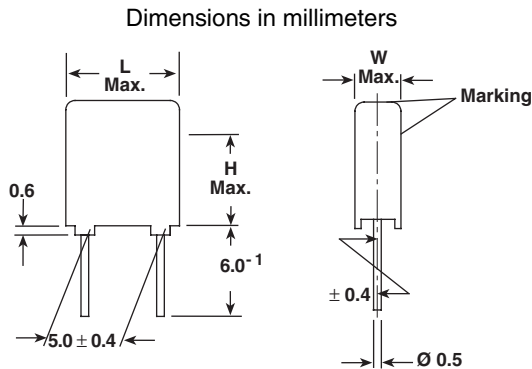


Metallized Polycarbonate Film Capacitor

Related Document: IEC 60384-6


MAIN APPLICATIONS

High frequency coupling and decoupling for fast digital and analog IC's; filter, timing and integrating circuits.

MARKING

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

DIELECTRIC

Polycarbonate film

ELECTRODES

Vacuum deposited aluminum

COATING

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

CONSTRUCTION

Extended metallized film (refer to general information)

LEADS

Tinned wire

IEC TEST CLASSIFICATION

55/100/21, according to IEC 60068

OPERATING TEMPERATURE RANGE

- 55°C to + 100°C

MAXIMUM PULSE RISE TIME

| PCM (mm) | Maximum Pulse Rise Time d_v/d_t [V/ μ s] | |
|-------------|--|---------|
| | 63 VDC | 100 VDC |
| 5 | 17 | 24 |

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 | $C \leq 0.1\mu\text{F}$ | $0.1\mu\text{F} < C \leq 1.0\mu\text{F}$ |
|----------------|-------------------------|--|
| 1kHz | 3×10^{-3} | 3×10^{-3} |
| 10kHz | 4×10^{-3} | 4×10^{-3} |
| 100kHz | 10×10^{-3} | — |
| Maximum values | | |

FEATURES

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


CAPACITANCE RANGE

0.01 μ F to 0.33 μ F


CAPACITANCE TOLERANCES

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

RoHS
COMPLIANT

RATED VOLTAGES (U_R)

63 VDC, 100 VDC

PERMISSIBLE AC VOLTAGES (RMS) UP TO 60HZ

40 VAC, 63 VAC

TEST VOLTAGE (ELECTRODE/ELECTRODE)

1.6 x U_R for 2 s

INSULATION RESISTANCE

Measured at 100 VDC (63 VDC series measured at 50 VDC) after one minute
3750 M Ω minimum value (50,000 M Ω typical value)

CAPACITANCE DRIFT

Up to + 40°C, $\pm 1\%$ 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

~ 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 < 1 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.



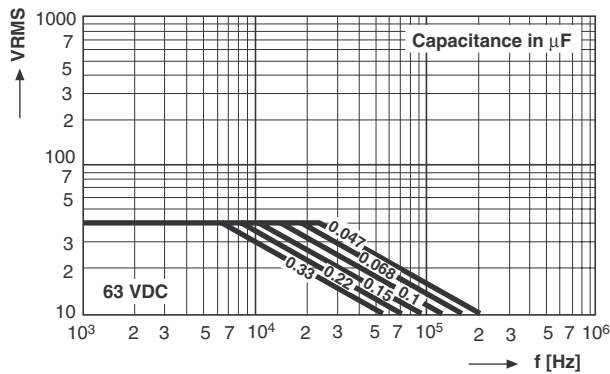
| CAPACITANCE | CAPACITANCE CODE | VOLTAGE CODE 06 63 VDC/ 40 VAC | | | VOLTAGE CODE 01 100 VDC/ 63 VAC | | |
|---------------|------------------|--------------------------------------|------|-----|---------------------------------------|-----|-----|
| | | W | H | L | W | H | L |
| 0.01 μ F | - 310 | — | — | — | 2.5 | 6.0 | 7.5 |
| 0.015 μ F | - 315 | — | — | — | 2.5 | 6.0 | 7.5 |
| 0.022 μ F | - 322 | — | — | — | 2.5 | 6.0 | 7.5 |
| 0.033 μ F | - 333 | — | — | — | 2.5 | 6.0 | 7.5 |
| 0.047 μ F | - 347 | 2.5 | 6.0 | 7.5 | — | — | — |
| 0.068 μ F | - 368 | 2.5 | 6.0 | 7.5 | — | — | — |
| 0.10 μ F | - 410 | 3.5 | 8.5 | 7.5 | — | — | — |
| 0.15 μ F | - 415 | 3.5 | 8.5 | 7.5 | — | — | — |
| 0.22 μ F | - 422 | 4.5 | 9.5 | 7.5 | — | — | — |
| 0.33 μ F | - 433 | 5.0 | 10.0 | 7.5 | — | — | — |

Further C-values upon request

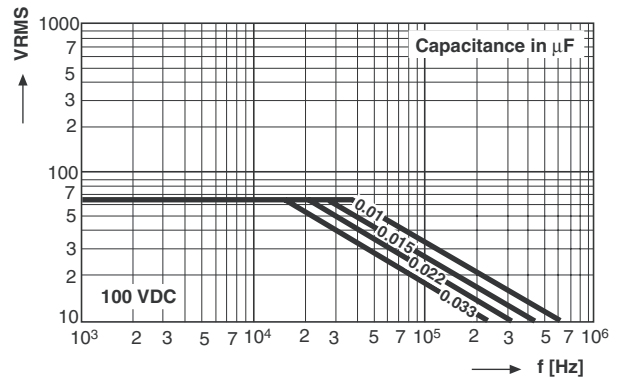
RECOMMENDED PACKAGING

| LETTER CODE | TYPE OF PACKAGING | HEIGHT (H) (mm) | REEL DIAMETER (mm) | ORDERING CODE EXAMPLE | PCM 5 |
|-------------|-------------------|-----------------|--------------------|-----------------------|-------|
| D | AMMO | 16.5 | S* | MKC 1858-433-065-D | X |
| G | AMMO | 18.5 | S* | MKC 1858-433-065-G | X |
| F | REEL | 16.5 | 350 | MKC 1858-433-065-F | X |
| W | REEL | 18.5 | 350 | MKC 1858-433-065-W | X |
| — | BULK | — | — | MKC 1858-433-065 | X |

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



Permissible AC Voltage versus Frequency



Permissible AC Voltage versus Frequency



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