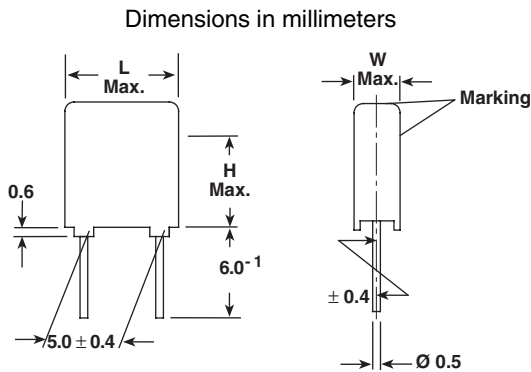


Metallized Polycarbonate Film Capacitor

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)

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 $0.5 \times U_R$)

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


RoHS
COMPLIANT

MKC 1858



Vishay Roederstein

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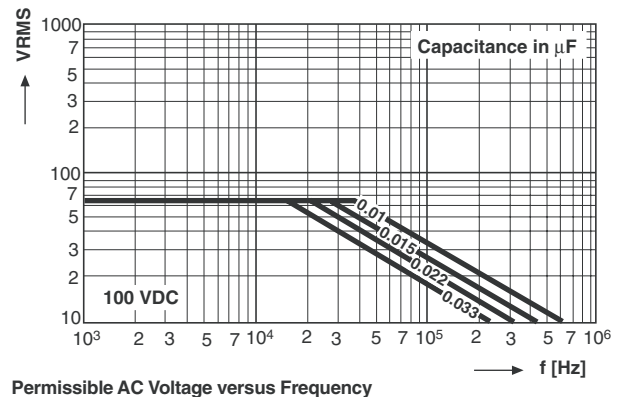
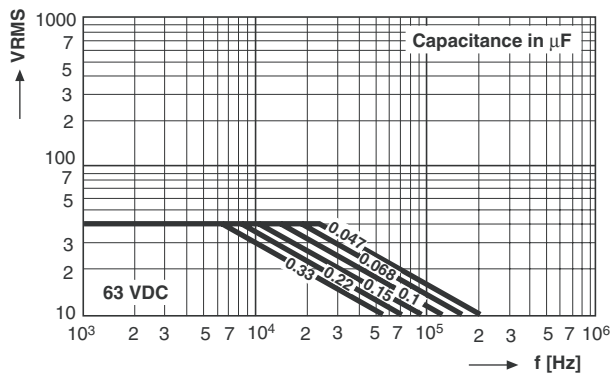
CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 06 63 VDC/ 40 VAC			VOLTAGE CODE 01 100 VDC/ 63 VAC		
		W	H	L	W	H	L
0.01 μ F	- 310	—	—	—	2.5	6.0	7.5
0.015 μ F	- 315	—	—	—	2.5	6.0	7.5
0.022 μ F	- 322	—	—	—	2.5	6.0	7.5
0.033 μ F	- 333	—	—	—	2.5	6.0	7.5
0.047 μ F	- 347	2.5	6.0	7.5	—	—	—
0.068 μ F	- 368	2.5	6.0	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)





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