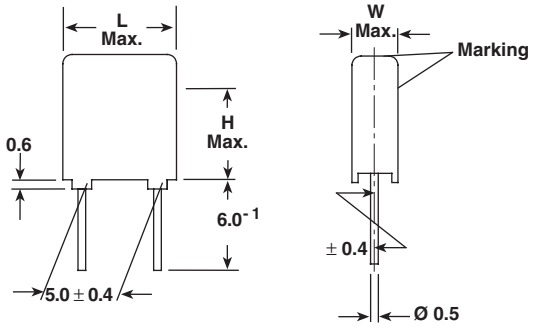
Not for new designs

Vishay Roederstein

Metallized Polycarbonate Film Capacitor
Related Document: IEC 60384-6

Dimensions in millimeters



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

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

Pb-free

e3

RoHS COMPLIANT

CAPACITANCE RANGE
0.01µF to 0.33µF

CAPACITANCE TOLERANCES
± 20% (M), ± 10% (K), ± 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 MΩ minimum value (50,000 MΩ typical value)

CAPACITANCE DRIFT
Up to + 40°C, ± 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.

MAXIMUM PULSE RISE TIME

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

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

DISSIPATION FACTOR TAN δ

MEASURED AT	C ≤ 0.1µF	0.1µF < C ≤ 1.0µF
1kHz	3×10^{-3}	3×10^{-3}
10kHz	4×10^{-3}	4×10^{-3}
100kHz	10×10^{-3}	—
	Maximum values	

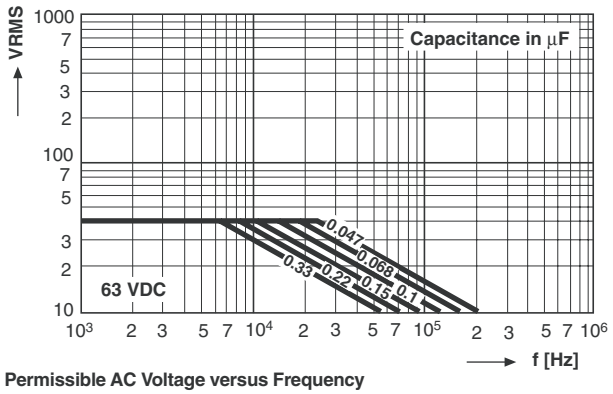
CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 06 63 VDC/ 40 VAC			VOLTAGE CODE 01 100 VDC/ 63 VAC		
		W	H	L	W	H	L
0.01µF	- 310	—	—	—	2.5	6.0	7.5
0.015µF	- 315	—	—	—	2.5	6.0	7.5
0.022µF	- 322	—	—	—	2.5	6.0	7.5
0.033µF	- 333	—	—	—	2.5	6.0	7.5
0.047µF	- 347	2.5	6.0	7.5	—	—	—
0.068µF	- 368	2.5	6.0	7.5	—	—	—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

Further C-values upon request

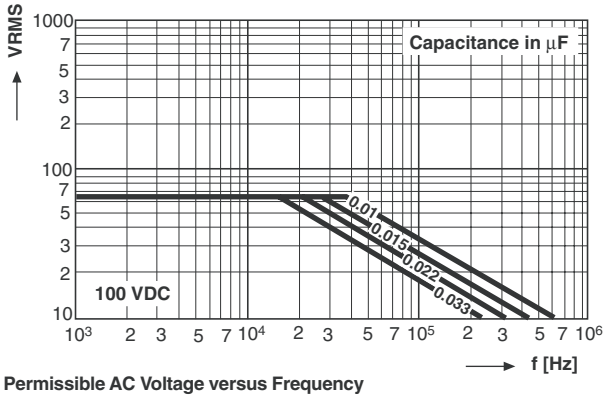
RECOMMENDED PACKAGING

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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