Metallized Polycarbonate Film Capacitor
Related Document: CECC 30 500

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

CAPACITANCE RANGE:
0.01µF to 0.33µF

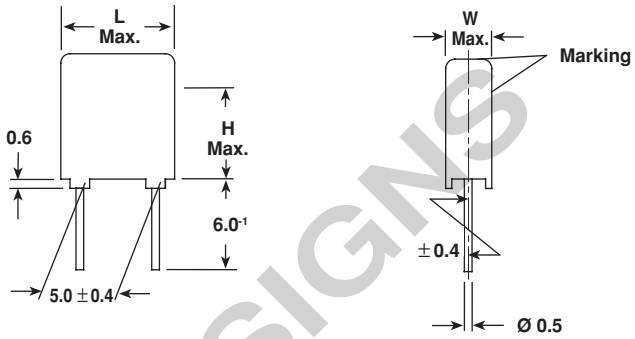
CAPACITANCE TOLERANCES:
± 20% (M), ± 10% (K), ± 5% (J)

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

Dimensions in millimeters



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 provided in this catalog.

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 d_v/d_t values can be permitted.

DISSIPATION FACTOR TAN δ

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

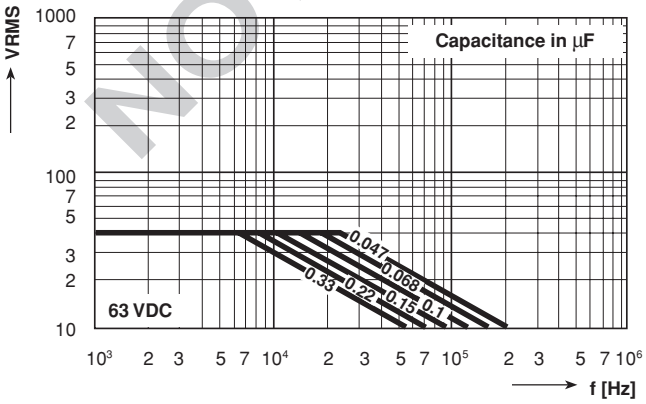
CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 06 63 VDC/ 40 VAC			VOLTAGE CODE 01 100 VDC/ 63 VAC		
		W	H	L	W	H	L
0.01 µF	- 310	—	—	—	2.5	6.0	7.5
0.015 µF	- 315	—	—	—	2.5	6.0	7.5
0.022 µF	- 322	—	—	—	2.5	6.0	7.5
0.033 µF	- 333	—	—	—	2.5	6.0	7.5
0.047 µF	- 347	2.5	6.0	7.5	—	—	—
0.068 µF	- 368	2.5	6.0	7.5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

Further C-values upon request

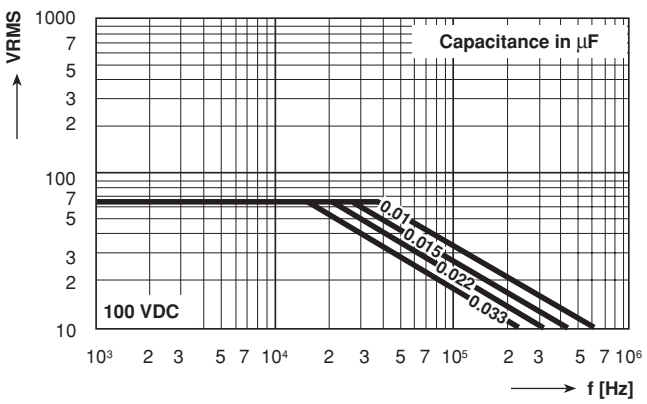
RECOMMENDED PACKAGING

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



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