

**Metallized Polypropylene Film Capacitor**  
**Related Document: IEC 60384-16**



**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**

0.01µF to 0.1µF

**CAPACITANCE DRIFT**

Up to + 40°C, < 0.5% for a period of two years

**DISSIPATION FACTOR TAN δ**

MEASURED AT	C ≤ 0.1µF
1kHz	0.4 x 10 <sup>-3</sup>
10kHz	0.6 x 10 <sup>-3</sup>
100kHz	4 x 10 <sup>-3</sup>
Maximum values	

**FEATURES**

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



**CAPACITANCE TOLERANCES**

± 10% (K), ± 5% (J), ± 2.5% (H), ± 1% (F)



**RATED VOLTAGES (U<sub>R</sub>)**

160 VDC

**RoHS**  
COMPLIANT

**PERMISSIBLE AC VOLTAGES (RMS) UP TO 60HZ**

100 VAC

**TEST VOLTAGE (ELECTRODE/ELECTRODE)**

1.6 x U<sub>R</sub> for 2 s

**INSULATION RESISTANCE**

Measured at 100 VDC after one minute  
100,000 MΩ minimum value

**TEMPERATURE COEFFICIENT**

- 250°C x 10<sup>-6</sup>/°C (typical value)

**MAXIMUM PULSE RISE TIME**

dv/dt = 390 V/µs

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 U<sub>C</sub>**

At + 85°C: U<sub>C</sub> = 1.0 U<sub>R</sub>

At + 100°C: U<sub>C</sub> = 0.7 U<sub>R</sub>

**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<sub>R</sub>)

For further details, please refer to the general information available at [www.vishay.com/doc?26033](http://www.vishay.com/doc?26033).

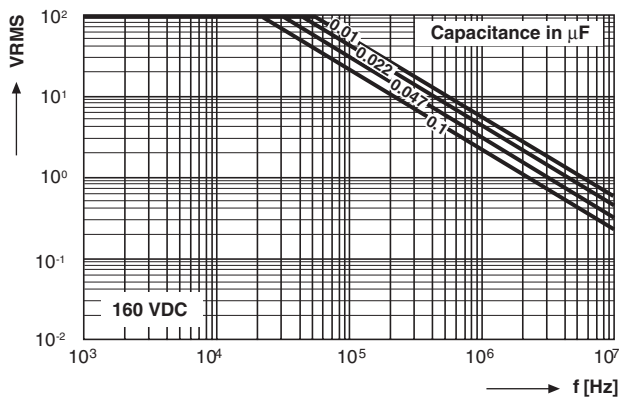


CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 16 160 VDC/100 VAC		
		W	H	L
0.01 $\mu$ F	- 310	5.5	7.0	7.5
0.015 $\mu$ F	- 315	5.5	7.0	7.5
0.022 $\mu$ F	- 322	5.5	7.0	7.5
0.033 $\mu$ F	- 333	7.5	9.0	7.5
0.047 $\mu$ F	- 347	7.5	9.0	7.5
0.068 $\mu$ F	- 368	7.5	9.0	7.5
0.1 $\mu$ F	- 410	9.0	11.0	7.5

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	X
G	AMMO	18.5	S*	MKP 1837-322-162-G	X
F	REEL	16.5	350	MKP 1837-322-162-F	X
W	REEL	18.5	350	MKP 1837-322-162-W	X
—	BULK	—	—	MKP 1837-322-162	X





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