

# MML™ C-Series

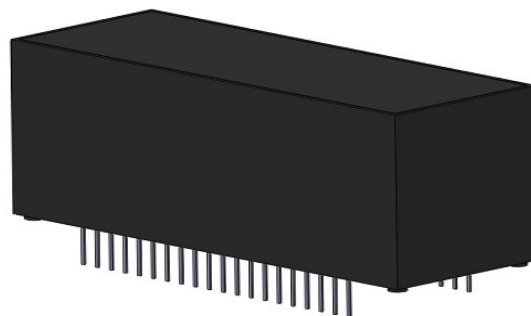
## Miniature Micro-Layer™ Film Capacitor with Metallized Polymer Dielectric Industry-Leading Performance at Temperatures up to 140°C

### FEATURES

- ◆ Up to 50% size and weight reduction vs traditional technologies
- ◆ High temperature to +140°C
- ◆ Stable Performance through Temperature/Voltage Range
- ◆ Rugged/Lightweight Construction

### APPLICATIONS

Aerospace & Defense, Industrial, Medical, Transportation



### PHYSICAL CHARACTERISTICS

**Construction:** Non-Inductive stacked metallized polymer film encapsulated in flame retardant high temperature epoxy

**Case:** Flame retardant, molded diallyl phthalate (DAP) Housing

**Leads:** Tinned copper pins on 0.100" centers. See page 2 for number of pins

### ELECTRICAL SPECIFICATIONS

**Operating Temp:** -55°C to +125°C (Up to 140°C with derating)

**Capacitance Range:** 2.2µF to 300µF

**Capacitance Tolerance:** ±10%

**Voltage Range:** 300VDC–1000VDC

**Dissipation Factor:** 1.0% max, when measured at 1kHz @ 25°C

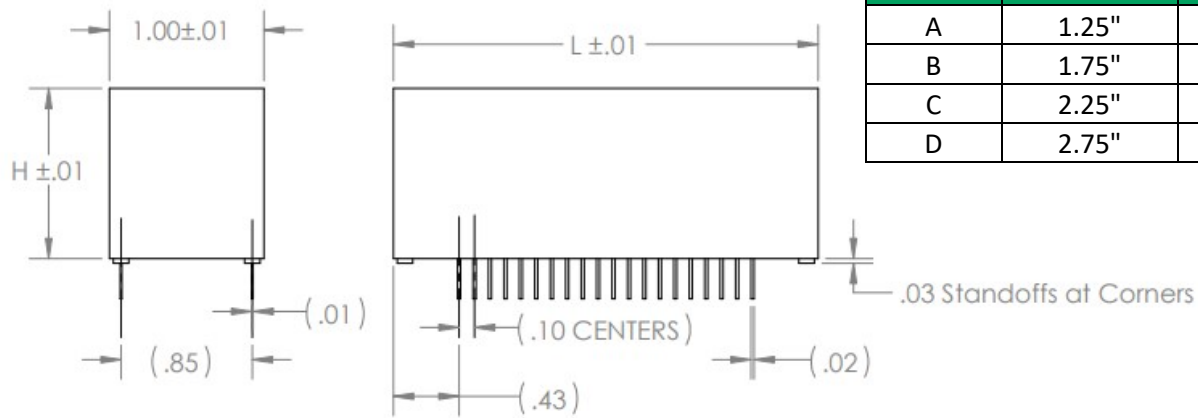
**Insulation Resistance:** 10,000 MΩ-µF minimum, when measured at rated voltage (up to 500VDC max) @ 25°C

**Dielectric Withstanding Voltage:** 1.5\*U<sub>RDC</sub> for 1 minute

### ORDERING GUIDE

<u>MMLC</u>	<u>B</u>	<u>07</u>	<b>Example</b>
<b>Series</b>	<b>Case Code</b> See Capacitance Ratings Table (page 2)	<b>Capacitance Code</b> See Capacitance Ratings Table (page 2)	<b>MMLCB07</b>
			Capacitance 54µF
			Voltage 450VDC
			Case Height 0.9 in

**\*\*Custom configurations and extended/intermediary values available upon request.**

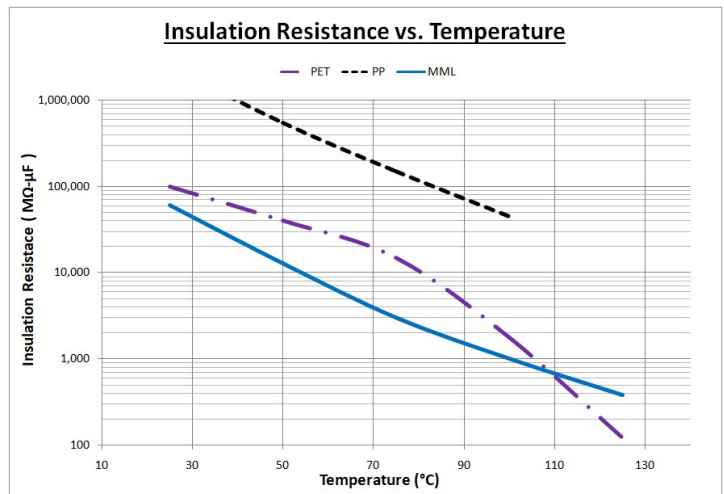
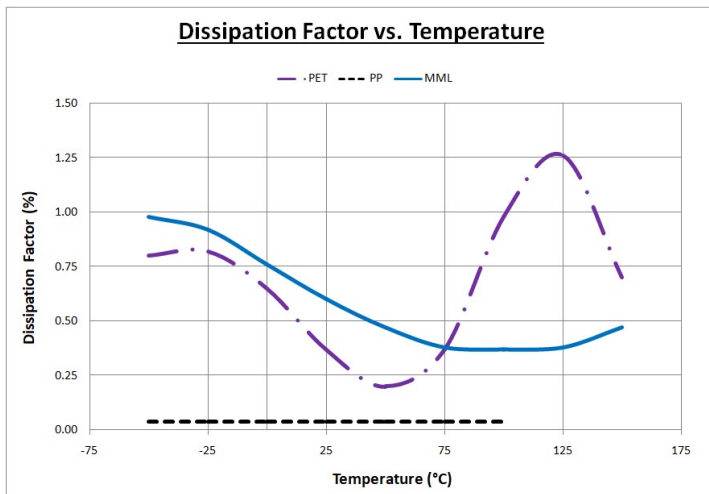
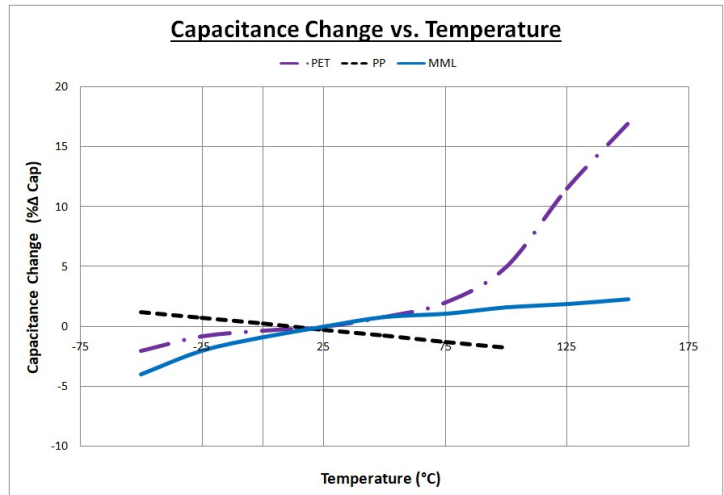
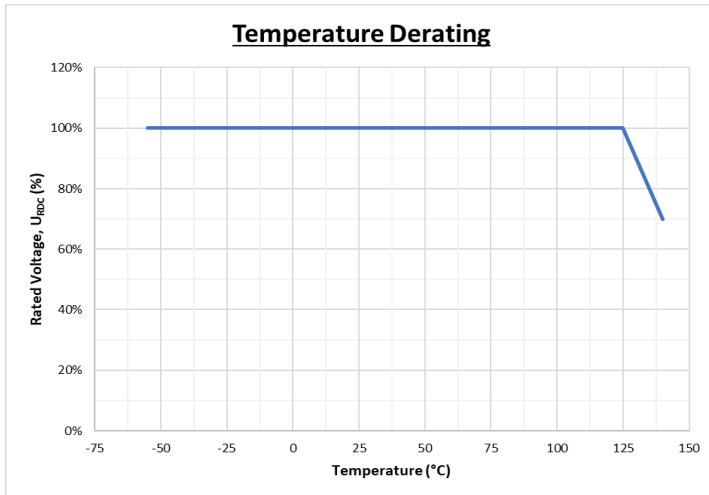


Case Code	Case Length "L"	No. Pins per Side
A	1.25"	5
B	1.75"	10
C	2.25"	15
D	2.75"	20

Rated Voltage (VDC)	Capacitance Code	Case Height "H"	Rated Capacitance by Case Code			
			A (1.25")	B (1.75")	C (2.25")	D (2.75")
300V	01	0.5"	30 $\mu$ F	45 $\mu$ F	60 $\mu$ F	75 $\mu$ F
	02	0.7"	60 $\mu$ F	90 $\mu$ F	120 $\mu$ F	150 $\mu$ F
	03	0.9"	90 $\mu$ F	135 $\mu$ F	180 $\mu$ F	225 $\mu$ F
	04	1.1"	120 $\mu$ F	180 $\mu$ F	240 $\mu$ F	300 $\mu$ F
450V	05	0.5"	12 $\mu$ F	18 $\mu$ F	24 $\mu$ F	30 $\mu$ F
	06	0.7"	24 $\mu$ F	36 $\mu$ F	48 $\mu$ F	60 $\mu$ F
	07	0.9"	36 $\mu$ F	54 $\mu$ F	72 $\mu$ F	90 $\mu$ F
	08	1.1"	48 $\mu$ F	72 $\mu$ F	96 $\mu$ F	120 $\mu$ F
600V	09	0.5"	6 $\mu$ F	9 $\mu$ F	12 $\mu$ F	16 $\mu$ F
	10	0.7"	12 $\mu$ F	18 $\mu$ F	25 $\mu$ F	32 $\mu$ F
	11	0.9"	18 $\mu$ F	27 $\mu$ F	38 $\mu$ F	48 $\mu$ F
	12	1.1"	24 $\mu$ F	36 $\mu$ F	50 $\mu$ F	64 $\mu$ F
850V	13	0.5"	4 $\mu$ F	6 $\mu$ F	8 $\mu$ F	10 $\mu$ F
	14	0.7"	8 $\mu$ F	12 $\mu$ F	16 $\mu$ F	20 $\mu$ F
	15	0.9"	12 $\mu$ F	18 $\mu$ F	24 $\mu$ F	30 $\mu$ F
	16	1.1"	16 $\mu$ F	24 $\mu$ F	32 $\mu$ F	40 $\mu$ F
1000V	17	0.5"	2.2 $\mu$ F	3.3 $\mu$ F	4.7 $\mu$ F	5.6 $\mu$ F
	18	0.7"	4.7 $\mu$ F	6.8 $\mu$ F	9 $\mu$ F	12 $\mu$ F
	19	0.9"	6.8 $\mu$ F	10 $\mu$ F	14 $\mu$ F	17 $\mu$ F
	20	1.1"	9 $\mu$ F	14 $\mu$ F	18 $\mu$ F	23 $\mu$ F

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## MML™ Performance Characteristics



Environmental Test	Standard	Method	Condition
Humidity (Steady-State)	MIL-STD-202	103	C
Barometric Pressure (Reduced)	MIL-STD-202	105	C
Thermal Shock	MIL-STD-202	107	A
Life (at Elevated Ambient Temperature)	MIL-STD-202	108	F

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