

# MML™ M-Series

## Miniature Micro-Layer™ Film Capacitor with Metallized Polymer Dielectric

### Industry-Leading Performance at Temperatures up to 140°C

#### FEATURES

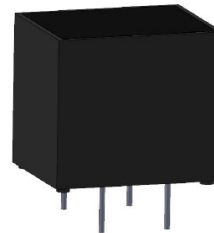
- ◆ Up to 50% size and weight reduction vs traditional technologies
- ◆ High temperature to +140°C
- ◆ Stable Performance through Temperature/Voltage Range
- ◆ Rugged/Lightweight Construction

#### APPLICATIONS

Aerospace & Defense, Industrial, Medical, Transportation

#### PHYSICAL CHARACTERISTICS

- Construction:** Non-Inductive stacked metallized polymer film encapsulated in flame retardant resin
- Case:** Flame retardant, molded diallyl phthalate (DAP) Housing
- Leads:** 18AWG 60Sn/40Pb Solder Coated Copper Wire  
See page 2 for number of leads and lead spacing



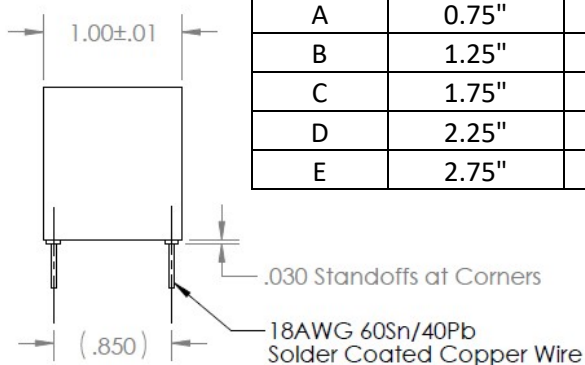
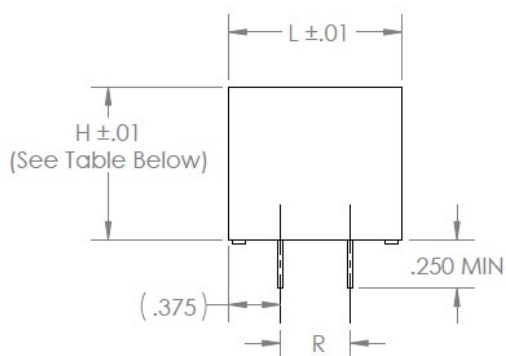
#### ELECTRICAL SPECIFICATIONS

- Operating Temp:** -55°C to +125°C (Up to 140°C at 0.7\*U<sub>RDC</sub>)
- Capacitance Range:** 1.1µF 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>MMLM</u>	<u>E</u>	<u>14</u>	<u>Example</u>
<b>Series</b>	<b>Case Code</b> See Capacitance Ratings Table (page 2)	<b>Capacitance Code</b> See Capacitance Ratings Table (page 2)	<b>MMLME14</b>
			Capacitance 20µF
			Voltage 850VDC
			Case Height 0.7 in

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

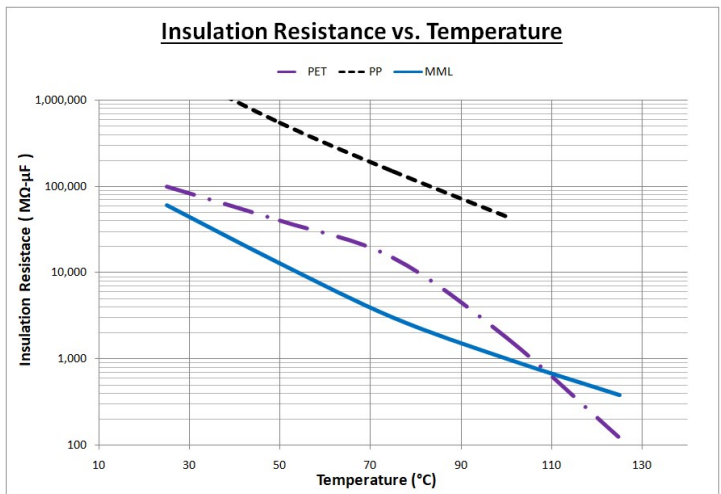
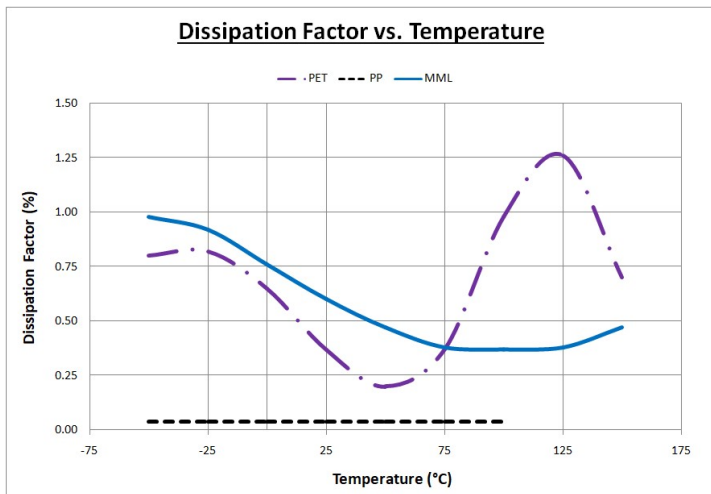
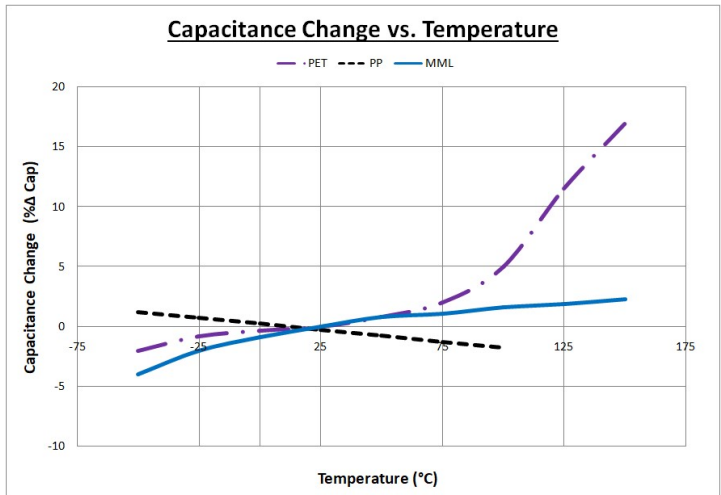
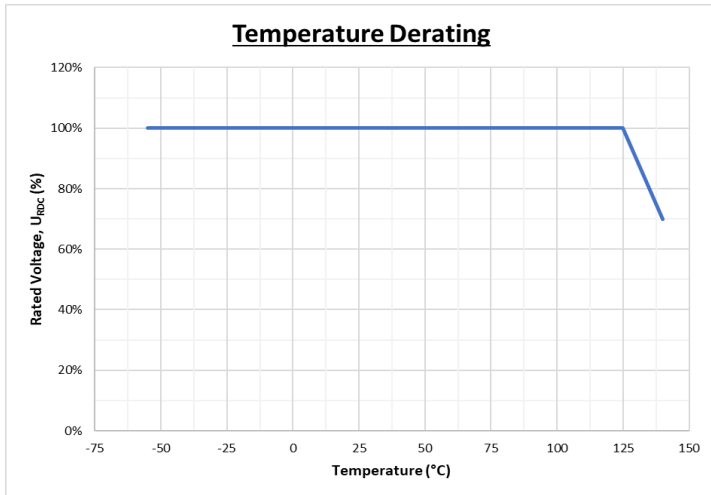


Case Code	Case Length "L"	Lead Spacing "R"	No. Leads per Side
A	0.75"	-	1
B	1.25"	0.50"	2
C	1.75"	1.00"	2
D	2.25"	1.50"	2
E	2.75"	2.00"	2

Rated Voltage (VDC)	Capacitance Code	Case Height "H"	Rated Capacitance by Case Code				
			A (0.75")	B (1.25")	C (1.75")	D (2.25")	E (2.75")
300V	01	0.5"	15 µF	30 µF	45 µF	60 µF	75 µF
	02	0.7"	30 µF	60 µF	90 µF	120 µF	150 µF
	03	0.9"	45 µF	90 µF	135 µF	180 µF	225 µF
	04	1.1"	60 µF	120 µF	180 µF	240 µF	300 µF
450V	05	0.5"	6 µF	12 µF	18 µF	24 µF	30 µF
	06	0.7"	12 µF	24 µF	36 µF	48 µF	60 µF
	07	0.9"	18 µF	36 µF	54 µF	72 µF	90 µF
	08	1.1"	24 µF	48 µF	72 µF	96 µF	120 µF
600V	09	0.5"	3 µF	6 µF	9 µF	12 µF	16 µF
	10	0.7"	6 µF	12 µF	18 µF	25 µF	32 µF
	11	0.9"	9 µF	18 µF	27 µF	38 µF	48 µF
	12	1.1"	12 µF	24 µF	36 µF	50 µF	64 µF
850V	13	0.5"	2 µF	4 µF	6 µF	8 µF	10 µF
	14	0.7"	4 µF	8 µF	12 µF	16 µF	20 µF
	15	0.9"	6 µF	12 µF	18 µF	24 µF	30 µF
	16	1.1"	8 µF	16 µF	24 µF	32 µF	40 µF
1000V	17	0.5"	1.1 µF	2.2 µF	3.3 µF	4.7 µF	5.6 µF
	18	0.7"	2.2 µF	4.7 µF	6.8 µF	9 µF	12 µF
	19	0.9"	3.3 µF	6.8 µF	10 µF	14 µF	17 µF
	20	1.1"	4.7 µF	9 µF	14 µF	18 µF	23 µF

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

## 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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