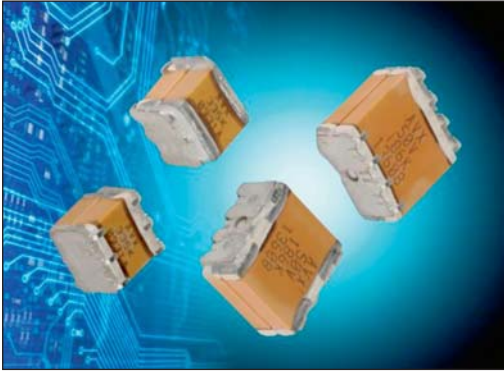


# SMPS Stacked MLC Capacitors (SMM Style) Extended Range



## GENERAL DESCRIPTION

The SMM series SMPS capacitors incorporate the Super X7R dielectric material. AVX SMM stacked capacitors offer high dielectric constant (K) characteristics allowing for an extended capacitance range. The higher capacitance values in the smaller case sizes reduce the amount of board space needed to mount these components. The SMM series capacitors are designed for use in applications ranging from high end DC/DC converters to general power supplies, telecom networks, snubbers, aerospace instrumentation panels, hybrid power applications and more.

## ELECTRICAL SPECIFICATIONS

### Temperature Coefficient

±15%, -55°C to +125°C

### Capacitance Test (MIL-STD-202 Method 305)

25°C, 1.0 ± 0.2 Vrms (open circuit voltage) at 1 kHz

### Dissipation Factor 25°C

2.5% Max @ 25°C, 1.0 ± 0.2 Vrms (open circuit voltage) at 1 kHz

### Insulation Resistance 25°C (MIL-STD-202 Method 302)

1000 MΩ-μF, whichever is less

### Insulation Resistance 125°C (MIL-STD-202 Method 302)

100 MΩ-μF, whichever is less

### Dielectric Withstanding Voltage 25°C (Flash Test)

250% rated voltage for 5 seconds with 50 mA maximum charging current (500 Volt units @ 750 VDC)

### Life Test (1000 hrs)

200% rated voltage for at 125°C (500 Volts units @ 600 VDC)

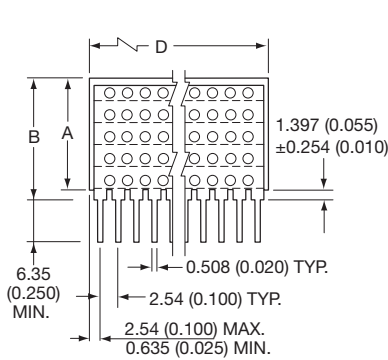
**Not RoHS Compliant**

## HOW TO ORDER

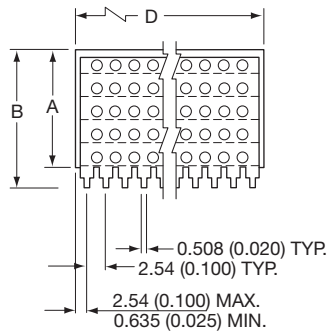
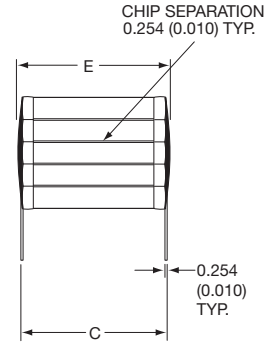
<b>SMM4</b>	<b>5</b>	<b>C</b>	<b>186</b>	<b>M</b>	<b>A</b>	<b>K</b>	<b>120</b>
<b>AVX Style</b>	<b>Voltage</b>	<b>Temperature Coefficient</b>	<b>Capacitance Code</b>	<b>Tolerance</b>	<b>Test Level</b>	<b>Leads</b>	<b>Height</b>
SMM3	50V = 5	X7R = C	(pF - 2 significant digits + number of zeros)	K = ±10%	A = Standard	N = Straight Lead	Max Dimension "A"
SMM4	100V = 1		1 μF = 105	M = ±20%	B = Hi-Rel*	K = Leads formed in	120 = 0.120"
SMM5	200V = 2		10 μF = 106			M = Leads formed out	240 = 0.240"
	500V = 7		100 μF = 107				360 = 0.360"
							480 = 0.480"
							600 = 0.600"

\*Hi-Rel screening for consists of 100% Group A (B Level), Subgroup 1 per MIL-PRF-49470.

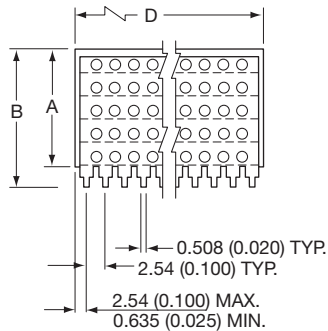
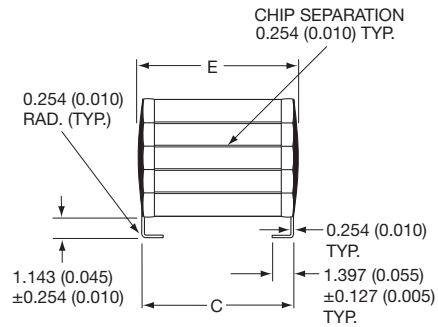
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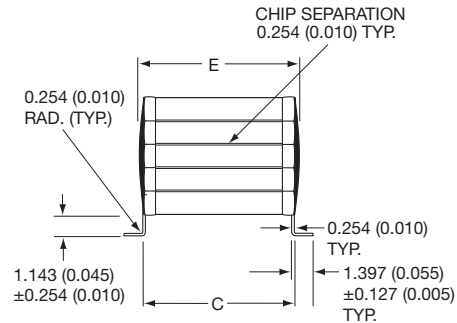
“N” STYLE LEADS



“K” STYLE LEADS



“M” STYLE LEADS



## DIMENSIONS

millimeters (inches)

Style	A (max.)	B (max.)	C ±.635 (±0.025)	D ±.635 (±0.025)	E (max.)	No. of Leads per side
SMM3	See next table below for maximum "A" Dimension	For "N" Style Leads: "A" Dimension Plus 1.651 (0.065)	11.4 (0.450)	26.7 (1.050)	12.7 (0.500)	10
SMM4		For "K" & "M" Style Leads: "A" Dimension Plus 1.39 (0.055)	10.2 (0.400)	10.2 (0.400)	11.2 (0.440)	4
SMM5			6.35 (0.250)	6.35 (0.250)	7.62 (0.300)	3

## CAPACITANCE RANGE

### Max Capacitance (µF) Available Versus Style and Height (Dimension "A")

AVX STYLE	SMM3				SMM4				SMM5			
	50V	100V	200V	500V	50V	100V	200V	500V	50V	100V	200V	500V
Height "A"												
0.120"	27	15	8.2	3.9	10	4.7	3.3	1.2	3.9	1.8	1.2	0.56
0.240"	56	27	15	6.8	18	8.2	6.8	2.2	6.8	3.3	2.2	1.0
0.360"	82	47	22	12	27	12	10	3.3	12	5.6	3.3	1.6
0.480"	100	56	33	15	39	18	12	4.7	15	6.8	4.7	2.2
0.600"	120	68	39	18	49	22	15	5.6	18	8.2	5.6	2.7