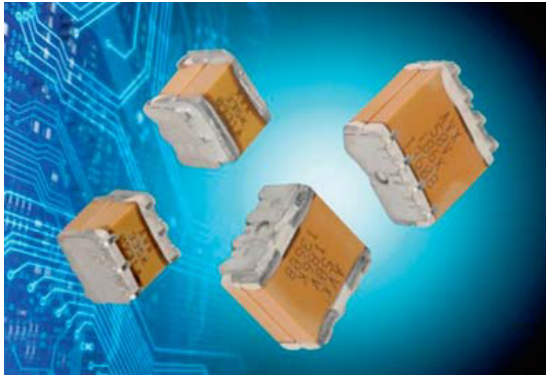


SMPS Stacked MLC Capacitors

SMM Style Stacked MLC Capacitors Extended Range



GENERAL DESCRIPTION

The SMM series SMPS capacitors incorporate the Super X7R dielectric material. 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

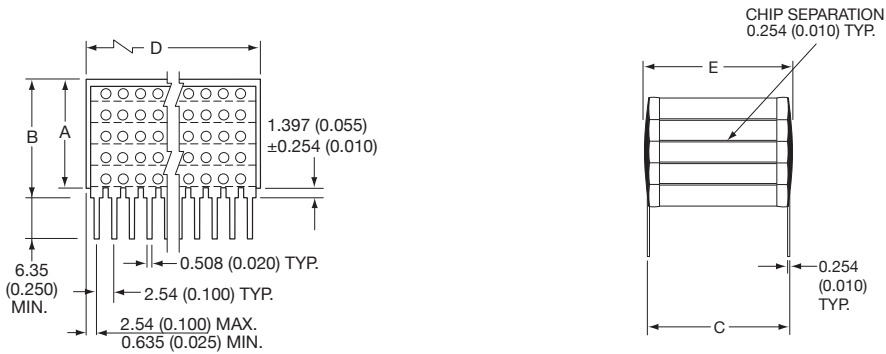
HOW TO ORDER

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

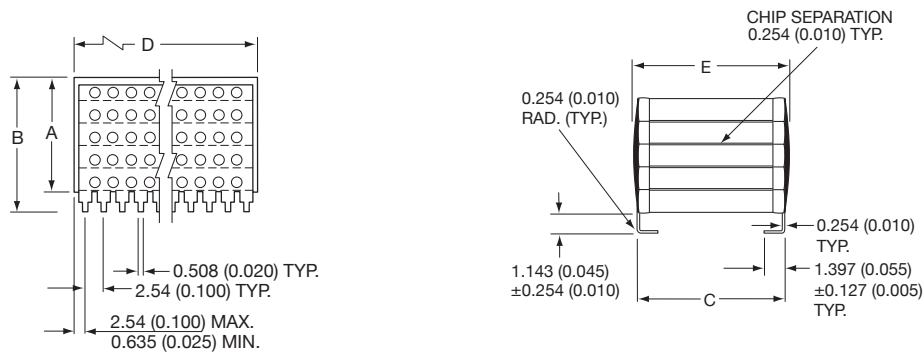
*Hi-Rel screening for consists of 100% Group A (B Level), Subgroup 1 per MIL-PRF-49470.

SMPS Stacked MLC Capacitors

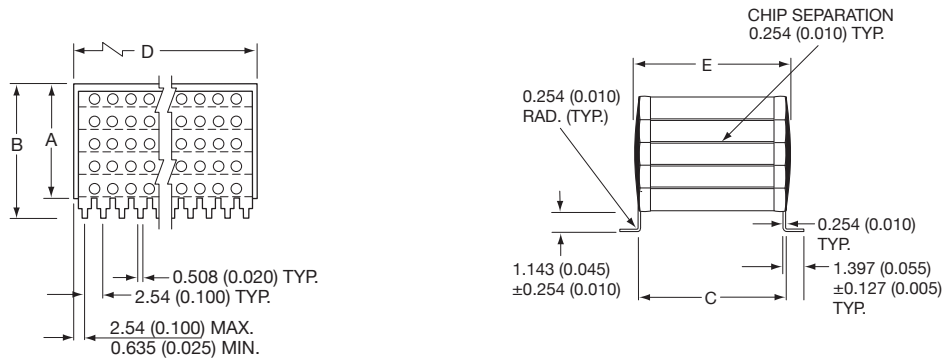
SMM Style Stacked MLC Capacitors Extended Range



“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) For "K" & "M" Style Leads: "A" Dimension Plus 1.39 (0.055)	11.4 (0.450)	26.7 (1.050)	12.7 (0.500)	10
SMM4			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 (Diminsion "A")

STYLE	SMM3				SMM4				SMM5			
	50V	100V	200V	500V	50V	100V	200V	500V	50V	100V	200V	500V
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