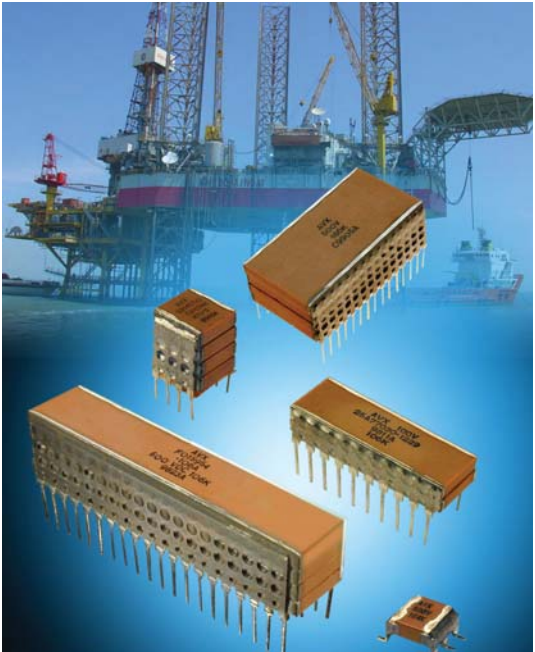


SMPS Stacked MLC Capacitors



SMX Style for High Temperature Applications up to 200°C



ELECTRICAL SPECIFICATIONS

Temperature Coefficient

C0G: A Temperature Coefficient 0 $\pm$ 30 ppm/°C, -55° to +200°C
 X7R/X9U: C Temperature Coefficient $\pm$ 15%, -55°C to +125°C
 +15% - 56%, -55°C to +200°C

Capacitance Test (MIL-STD-202 Method 305)

25°C, 1.0 $\pm$ 0.2 Vrms (open circuit voltage) at 1KHz

Dissipation Factor 25°C

C0G: 0.15% Max @ 25°C, 1.0 $\pm$ 0.2 Vrms (open circuit voltage) at 1KHz
 X7R/X9U: 2.5% Max @ 25°C, 1.0 $\pm$ 0.2 Vrms (open circuit voltage) at 1KHz

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

100K M Ω or 1000 M Ω - μ F, whichever is less.

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

10K M Ω or 100 M Ω - μ F, whichever is less.

Insulation Resistance 200°C (MIL-STD-202 Method 302)

100 M Ω or 1 M Ω - μ F, whichever is less.

Dielectric Withstanding Voltage 25°C (Flash Test)

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

Moisture Resistance (MIL-STD-202 Method 106)

Ten cycles with no voltage applied.

Thermal Shock (MIL-STD-202 Method 107, Condition A)

Immersion Cycling (MIL-STD-202 Method 104, Condition B)

Resistance To Solder Heat (MIL-STD-202, Method 210, Condition B, for 20 seconds)

Not RoHS Compliant

HOW TO ORDER

AVX Styles: SMX1, SMX2, SMX3, SMX4, SMX5, SMX6

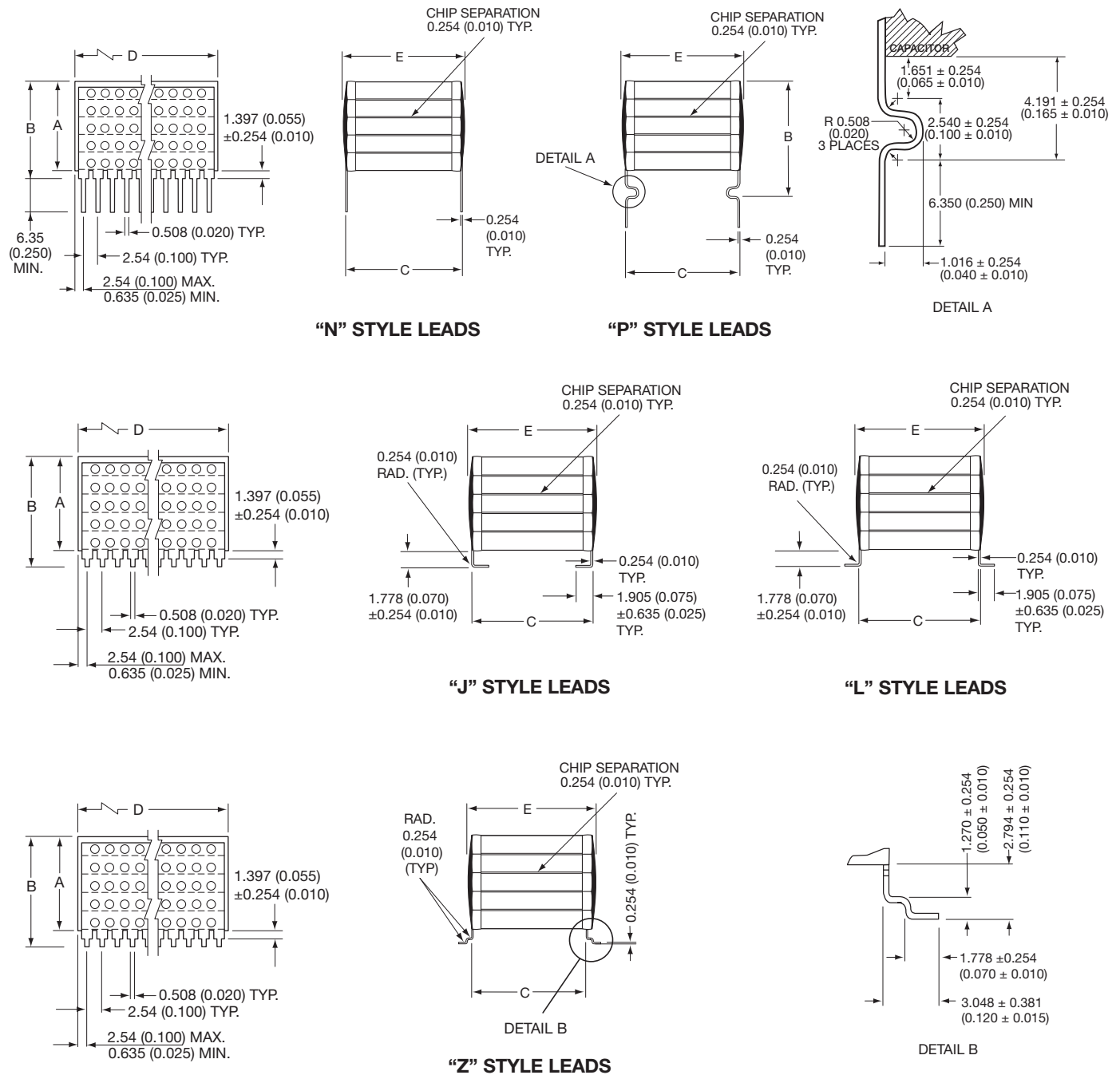
SMX	1	7	C	106	M	A	N	650
AVX Style SMX = Uncoated	Size See Dimensions chart	Voltage 25 = 3 50V = 5 100V = 1 200V = 2 500V = 7	Temperature Coefficient C0G = A X7R/X9U = C	Capacitance Code (2 significant digits + number of zeros) 10 pF = 100 100 pF = 101 1,000 pF = 102 22,000 pF = 223 220,000 pF = 224 1 μ F = 105 10 μ F = 106 100 μ F = 107	Capacitance Tolerance C0G: J = $\pm$ 5% K = $\pm$ 10% M = $\pm$ 20% X7R: K = $\pm$ 10% M = $\pm$ 20% Z = +80%, -20%	Test Level A = Standard	Termination N = Straight Lead J = Leads formed in L = Leads formed out P = P Style Leads Z = Z Style Leads	Height Max Dimension "A" 120 = 0.120" 240 = 0.240" 360 = 0.360" 480 = 0.480" 650 = 0.650"

Note: Capacitors with X7R/X9U dielectric is not intended for applications across AC supply mains or AC line filtering with polarity reversal. Contact plant for recommendations.

SMPS Stacked MLC Capacitors



SMX Style for High Temperature Applications up to 200°C



DIMENSIONS

millimeters (inches)

Style	A (max.)	B (max.)	C ±.635 (±0.025)	D ±.635 (±0.025)	E (max.)	No. of Leads per side
SMX1	See page 40 for maximum "A" Dimension	For "N" Style Leads: "A" Dimension Plus 1.651 (0.065) For "J" & "L" Style Leads: "A" Dimension Plus 2.032 (0.080) For "P" Style Leads: "A" Dimension Plus 4.445 (0.175) For "Z" Style Leads: "A" Dimension Plus 3.048 (0.120)	11.4 (0.450)	52.1 (2.050)	12.7 (0.500)	20
SMX2			20.3 (0.800)	38.4 (1.510)	22.1 (0.870)	15
SMX3			11.4 (0.450)	26.7 (1.050)	12.7 (0.500)	10
SMX4			10.2 (0.400)	10.2 (0.400)	11.2 (0.440)	4
SMX5			6.35 (0.250)	6.35 (0.250)	7.62 (0.300)	3
SMX6			31.8 (1.250)	52.1 (2.050)	34.3 (1.350)	20



