

FLEXITERM™ V+ MLC Chips

For High Voltage 600V to 3000V Applications



High value, low leakage and small size are difficult parameters to obtain in capacitors for high voltage systems. AVX special high voltage MLC chips capacitors meet these performance characteristics and are designed for applications such as snubbers in high frequency power converters, resonators in SMPS, and high voltage coupling/DC blocking. These high voltage chip designs exhibit low ESRs at high frequencies.

To make high voltage chips, larger physical sizes than are normally encountered are necessary. These larger sizes require that special precautions be taken in applying these chips in surface mount assemblies. In response to this, and to follow from the success of the FLEXITERM™ range of low voltage parts, AVX is delighted to offer a FLEXITERM™ high voltage range of capacitors, FLEXITERM™ V+.

The FLEXITERM™ layer is designed to enhance the mechanical flexure and temperature cycling performance of a standard ceramic capacitor, giving customers a solution where board flexure or temperature cycle damage are concerns.

HOW TO ORDER

1808	A	A	271	K	A	Z	1	A
AVX Style	Voltage	Temperature Coefficient	Capacitance Code (2 significant digits + no. of zeros)	Capacitance Tolerance	Test Level	Termination	Packaging	Special Code
1206	600V = C	COG = A	COG: J = $\pm 5\%$	A = Standard	Z = FLEXITERM™	1 = 7" Reel	A = Standard	
1210	1000V = A	X7R = C	K = $\pm 10\%$		X = FLEXITERM™	3 = 13" Reel		
1808	1500V = S		M = $\pm 20\%$		Tin Lead	9 = Bulk		
1812	2000V = G		X7R: K = $\pm 10\%$					
2220	2500V = W		M = $\pm 20\%$					
	3000V = H		Z = $+80\%$, -20%					
			1 $\mu\text{F} = 105$					

HIGH VOLTAGE X7R FLEXITERM™ CAPACITANCE VALUES

VOLTAGE	1206	1210	1808	1812	2220	
600	min max	150pF 0.015 μF	150pF 0.027 μF	150pF 0.033 μF	1000pF 0.068 μF	0.010 μF 0.15 μF
1000	min max	150pF 4700pF	150pF 0.010 μF	150pF 0.015 μF	150pF 0.027 μF	1000pF 0.068 μF
1500	min max	150pF 1200pF	150pF 2700pF	150pF 3900pF	150pF 8200pF	1000pF 0.022 μF
2000	min max	150pF 1000pF	150pF 1000pF	150pF 1800pF	150pF 4700pF	330pF 0.01 μF
2500	min max	—	—	150pF 1200pF	150pF 2200pF	330pF 6800pF
3000	min max	—	—	150pF 1000pF	150pF 1200pF	330pF 3300pF
L	3.00-3.40mm	3.00-3.40mm	4.32-4.82mm	4.20-4.80mm	5.30-6.10mm	
W	1.40-1.80mm	2.30-2.70mm	1.78-2.28mm	3.00-3.40mm	4.60-5.40mm	
T	0.74-1.75mm	0.81-1.70mm	1.29-2.03mm	0.81-2.54mm	1.29-3.05mm	

