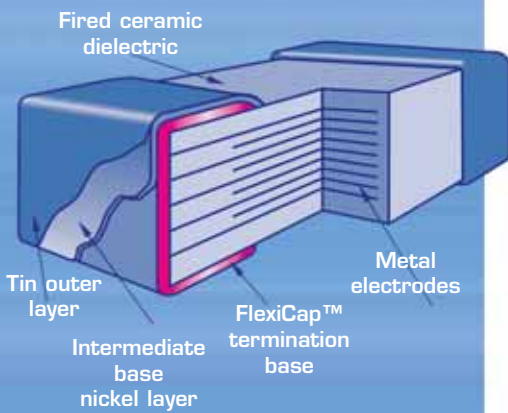


FlexiCap™ MLCC cross section



Syfer Technology Ltd manufactures quality multilayer ceramic components supplied to a worldwide customer base. Customers utilise Syfer's components in all Types of application including telecoms, industrial, automotive, military, aerospace, space and medical. Different applications require corresponding reliability grade components. The purpose of this document is to provide a guide to the different grades of multilayer ceramic components offered by Syfer. Syfer's state-of-the-art manufacturing and test equipment in the Norwich, England facility is supported by an integrated management system approved by BSI to ISO 9001, ISO 14001 and OHSAS 18001.

Planar Capacitor Arrays

Syfer Technology Limited has been manufacturing and supplying Planar Capacitor Arrays since 1990. The multilayer Planar Array is an application specific component designed for use in multi-line EMI filter circuits, typically found in filtered connectors. Planar Array technology affords the user weight and volumetric efficiency as well as performance and reliability advantages compared to other capacitor technologies.

Syfer's position as the world's leading supplier has been achieved through utilisation of the advantages inherent in our "Wet-Stack" process. A stress-free component is produced with mechanical precision, enabling a filter assembly to withstand the most rigorous of electrical specifications.

Syfer Flexicap™ termination

All ranges are available with FlexiCap™ termination material offering increased reliability and superior mechanical performance (board flex and temperature cycling) when compared with standard termination materials. Refer to Syfer application note reference AN0001. As can be seen from the table below (Summary of Bend Test Results), FlexiCap™ capacitors enable the board to be bent almost twice as much before mechanical cracking occurs. An additional benefit of FlexiCap™ is that MLCCs can withstand temperature cycling -55°C to 125°C in excess of 1,000 times without cracking.

Ordering information

Standard product code construction

1210	Y	100	0103	J	X	T	---
Chip size	Termination	Voltage	Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric Rel Release codes	Packaging	Suffix code
	<p>Y = FlexiCap™ termination base with Ni barrier (100% matte tin plating). RoHS compliant.</p> <p>H = FlexiCap™ termination base with Ni barrier (Tin/lead plating with min. 10% lead).</p> <p>F = Silver Palladium. RoHS compliant.</p> <p>J = Silver base with nickel barrier (100% matte tin plating). RoHS compliant.</p> <p>A = Silver base with nickel barrier (Tin/lead plating with min. 10% lead).</p>	<p>016 = 16 Volts 025 = 25 Volts 050 = 50 Volts 063 = 63 Volts 100 = 100 Volts 200 = 200 Volts 250 = 250 Volts 500 = 500 Volts 630 = 630 Volts</p> <p>1K0 = 1kV 1K2 = 1.2kV 1K5 = 1K5 2K0 = 2kV 2K5 = 2.5kV 3K0 = 3kV 4K0 = 4kV 5K0 = 5kV 6K0 = 6kV</p>	<p>First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following</p> <p>Example: 0103 = 10nF</p>	<p><10pF B = +/-0.1pF C = +/-0.25pF D = +/-0.5pF</p> <p>>= 10pF F = +/-1% G = +/-2% J = +/-5% K = +/-10% M = +/-20%</p>	<p>C = COG/NPO (1B)</p> <p>X = X7R (2R1)</p>	<p>T = 178mm (7") reel</p> <p>R = 330mm (13") reel</p> <p>B = Bulk pack - tubs</p>	<p>Used for specific customer requirements</p>