FLEXISAFE MLC Chips

For Ultra Safety Critical Applications





AVX have developed a range of components specifically for safety critical applications.

Utilizing the award-winning FLEXITERM[™] layer in conjunction with the cascade design previously used for high voltage MLCCs, a range of ceramic capacitors is now available for customers who require components designed with an industry leading set of safety features.

The FLEXITERM™ layer protects the component from any damage to the ceramic resulting from mechanical stress during PCB assembly or use with end customers. Board flexure type mechanical damage accounts for the majority of MLCC failures. The addition of the cascade structure protects the component from low insulation resistance failure resulting from other common causes for failure; thermal stress damage, repetitive strike ESD damage and placement damage. With the inclusion of the cascade design structure to complement the FLEXITERM™ layer, the FLEXISAFE range of capacitors has unbeatable safety features.

Ζ

Terminations

with 5% min lead *Not RoHS Compliant

= FLEXITERM

X = FLEXITERM™

2

Packaging

4 = 13" Reel

Α

Special Code A = Std. Product

HOW TO ORDER

FS03	5	C	104	K	Q
Size FS03 = 0603 FS05 = 0805 FS06 = 1206 FS10 = 1210	Voltage 16V = Y 25V = 3 50V = 5 100V = 1	Dielectric X7R = C	Capacitance Code (In pF) 2 Sig. Digits + Number of Zeros e.g. 10µF =106	$\begin{array}{l} \textbf{Capacitance} \\ \textbf{J} = \pm 5\% \\ \textbf{K} = \pm 10\% \\ \textbf{M} = \pm 20\% \end{array}$	Failure Rate A = Commercial 4 = Automotive Q = APS

FLEXISAFE X7R BANGE

Capacitance Code		FS03 = 0603			FS05 = 0805			FS06 = 1206			FS10 = 1210				
Soldering		Reflow/Wave			Reflow/Wave			Reflow/Wave			Reflow Only				
		16	25	50	100	16	25	50	100	16	25	50	16	25	50
102	μF 0.001														
182	0.0018														
222	0.0022														
332	0.0033														
472	0.0047														
103	0.01														
123	0.012														
153	0.015														
183	0.018														
223	0.022														
273	0.027														
333	0.033														
473	0.047														
563	0.056														
683	0.068														
823	0.082														
104	0.1														
124	0.12														
154	0.15														
224	0.22														
334	0.33														
474	0.47														

Qualified



