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.

HOW TO ORDER

FS03	5	C	104	K	Q	Z	2	A
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	**Capacitance Tolerance** J = ±5% K = ±10% M = ±20%	**Failure Rate** A = Commercial 4 = Automotive Q = APS	**Terminations** Z = FLEXITERM™ 'X = FLEXITERM™ with 5% min lead *Not RoHS Compliant	**Packaging** 2 = 7" Reel 4 = 13" Reel	**Special Code** A = Std. Product

FLEXISAFE X7R RANGE

Capacitance Code		FS03 = 0603				FS05 = 0805				FS06 = 1206				FS10 = 1210			FS20 = 2220
Soldering		Reflow/Wave				Reflow/Wave				Reflow/Wave				Reflow Only			Reflow Only
		16	25	50	100	16	25	50	100	16	25	50	100	16	25	50	100
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													■	■	■	
105	1																■

■ Qualified

RoHS COMPLIANT