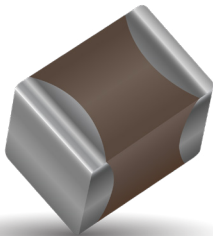# FLEXISAFE MLC Chips

General Specifications and Capacitance Range
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

0805	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 = FLEXITERMTM
*X = FLEXITERMTM 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		
Soldering		Reflow/Wave				Reflow/Wave				Reflow/Wave			Reflow Only		
WVDC		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

RoHS COMPLIANT