

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
 Size
 FS03 = 0603
 FS05 = 0805
 FS06 = 1206
 FS10 = 1210

5
 Voltage
 16V = Y
 25V = 3
 50V = 5
 100V = 1

C
 Dielectric
 X7R = C

104
 Capacitance Code (In pF)
 2 Sig. Digits + Number of Zeros
 e.g. 10µF = 106

K
 Capacitance Tolerance
 J = ±5%
 K = ±10%
 M = ±20%

Q
 Failure Rate
 A = Commercial
 4 = Automotive
 Q = APS

Z
 Terminations
 Z = FLEXITERM™
 X = FLEXITERM™ with 5% min lead

2
 Packaging
 2 = 7" Reel
 4 = 13" Reel

A
 Special Code
 A = Std. Product

*Not RoHS Compliant

FLEXISAFE X7R RANGE

Capacitance Code	FS03 = 0603				FS05 = 0805				FS06 = 1206				FS10 = 1210			FS20 = 2220
	Reflow/Wave				Reflow/Wave				Reflow/Wave				Reflow Only			Reflow Only
Soldering	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															

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