Open Mode capacitors

Open Mode capacitors have been designed specifically for use in applications where mechanical cracking is a severe problem and short circuits due to cracking are unacceptable. Open mode capacitors use inset electrode margins, which prevent any mechanical cracks which may form during board assembly from connecting to the internal electrodes. When combined with Syfer's FlexiCap[™] termination, Syfer Open Mode capacitors

provide a robust component with the assurance that if a part becomes cracked, the crack will be unlikely to result in short circuit failure.



Open Mode capacitor - Untested

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Open Mode capacitor - Qualification included cracking the components by severe bend tests. Following the bend tests cracked components were subjected to endurance / humidity tests, with no failures evident due to short circuits. Note: Depending on the severity of the crack, capacitance loss was between 0% and 70%.

Max capacitance in nF (X7R only)

	0603	0805	1206	1210	1812	2220	2225
16V	39	150	470	680	1500	3300	4700
25V	33	120	330	560	1200	2200	3900
50/63V	22	100	220	470	1000	1500	2700
100V	6.8	27	100	220	680	1000	1800
200/250V	2.7	15	68	100	330	680	1000

Ordering information - Open Mode capacitors

1206	Y	050	0224	K	X	т	M01
Chip size	Termination	Voltage	Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric codes	Packaging	Suffix
0603 0805 1206 1210 1812 2220 2225	Y = Polymer Termination FlexiCap™	016 = 16V 025 = 25V 050 = 50V 063 = 63V 100 = 100V 200 = 200V 250 = 250V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following. Example: 0224 = 220000pF	K = ±10%	X = X7R E = X7R (AEC-Q200 product)	T = 178mm (7") reel R = 330mm (13") reel	Syfer Open Mode capacitor