

# SYFER FLEXICAP™ SMD Ceramic Capacitors



## SYFER CAPACITORS

Developed and marketed by Syfer in 2001, FlexiCap™ flexible termination has been on PC boards for tens of thousands of operating hours. No other flexible termination on the market has a track record as long as Syfer's. An estimated 99% of all ceramic chip failures are due to mechanical flex. FlexiCap™ is applied to the device under the standard nickel barrier finish to accommodate a greater degree of board bending than conventional capacitors. FlexiCap™ will virtually eliminate mechanical flex cracking problems. FlexiCap™ is RoHS compliant and compatible with both leaded and lead-free solder processes.

### Features:

- Allows a greater degree of PCB deflection, typically twice that of standard MLCCs
- FlexiCap termination does not affect electrical characteristics or performance of the devices which can be used with no changes to the manufacturing process
- More resistant to temperature cycling

### Specifications:

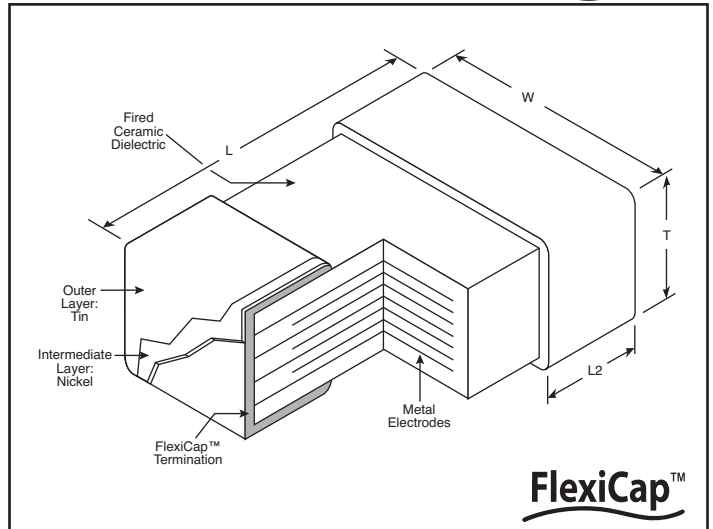
- Operating range: -55°C to +125°C (max. capacitance change: ±15%)
- Insulation resistance: 100 gigohm or 1000s, whichever is less
- Dissipation factor: < 0.025
- Dielectric strength with voltage applied for 5 seconds:
  - ≤ 200 Volts: 2.5 times; 500 & 630 Volts: 1.5 times;
  - ≥ 1 kV: 1.25 times

### Markets:

- Power supplies: DC-DC converters, UPS systems
- Telecom: Backplanes, linecards, modems, and base stations
- Lighting ballasts
- Industrial

### Applications:

- Can be used in all designs currently using standard MLCCs
- Suggested for high stress, critical circuit applications



### FlexiCap™

Style	DIMENSIONS: mm (in.)			
	L	W	T Max.	L2 Max.
0603	1.6±0.2 (.063±.008)	.8±0.2 (.031±.008)	0.8 (.031)	0.40 (.015)
0805	2.0±0.3 (.080±.012)	1.25±0.2 (.05±.008)	1.3 (.051)	0.75 (.030)
1206	3.2±0.3 (.126±.012)	1.6±0.2 (.063±.008)	1.6 (.063)	0.75 (.030)
1210	3.2±0.3 (.126±.012)	2.5±0.3 (.100±.012)	2.0 (.08)	0.75 (.030)
1808	4.5±0.35 (.18±.014)	2.0±0.3 (.080±.012)	2.0 (.08)	1.0 (.040)
1812	4.5±0.35 (.18±.014)	3.2±0.3 (.126±.012)	2.5 (.10)	1.0 (.040)
2220	5.7±0.4 (.225±.016)	5.0±0.4 (.197±.016)	2.5 (.10)	1.0 (.040)



LEAD-FREE



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Syfer Part No.	Value (pF)	Volt (DC)	Tol. (%)	Price Each			Reel Qty.	Price Per Piece
					1	50	100		
<b>Style 0603-Temperature Coeff. X7R</b>									
843-0603Y2000101K	0603Y2000101KXKT	100	200	10	.36	.22	.19	4000	.094
843-0603Y2000151K	0603Y2000151KXKT	150	200	10	.36	.22	.19	4000	.094
843-0603Y2000331K	0603Y2000331KXKT	330	200	10	.36	.22	.19	4000	.094
843-0603Y2000471K	0603Y2000471KXKT	470	200	10	.36	.22	.19	4000	.094
843-0603Y2000681K	0603Y2000681KXKT	680	200	10	.36	.22	.19	4000	.094
843-0603Y2000102K	0603Y2000102KXKT	1000	200	10	.38	.23	.21	4000	.101
843-0603Y2000152K	0603Y2000152KXKT	1500	200	10	.38	.23	.21	4000	.101
843-0603Y2000222K	0603Y2000222KXKT	2200	200	10	.38	.23	.21	4000	.101
843-0603Y2000332K	0603Y2000332KXKT	3300	200	10	.40	.24	.21	4000	.105
843-0603Y2000472K	0603Y2000472KXKT	4700	200	10	.43	.26	.23	4000	.114
<b>Style 0805-Temperature Coeff. X7R</b>									
843-0805Y5000101K	0805Y5000101KXKT	100	500	10	.40	.24	.22	3000	.107
843-0805Y5000221K	0805Y5000221KXKT	220	500	10	.40	.24	.22	3000	.107
843-0805Y5000471K	0805Y5000471KXKT	470	500	10	.40	.24	.22	3000	.107
843-0805Y2000102K	0805Y2000102KXKT	1000	200	10	.55	.33	.29	3000	.145
843-0805Y2000103K	0805Y2000103KXKT	10000	200	10	.57	.35	.30	3000	.15
843-0805Y2000223K	0805Y2000223KXKT	22000	200	10	.69	.42	.37	3000	.181
843-0805Y0500104K	0805Y0500104KXKT	.1µF	50	10	.53	.32	.28	3000	.14
<b>Style 1206-Temperature Coeff. X7R</b>									
843-1206Y6300470K	1206Y6300470KXKT	47	630	10	.73	.45	.39	2500	.194
843-1206Y1K00101K	1206Y1K00101KXKT	100	1000	10	.68	.41	.36	2500	.179
843-1206Y5000101K	1206Y5000101KXKT	100	500	10	.66	.40	.35	2500	.173
843-1206Y2K00471K	1206Y2K00471KXKT	470	2000	10	.71	.43	.38	2500	.188
843-1206Y1K00471K	1206Y1K00471KXKT	470	1000	10	.68	.41	.36	2500	.179
843-1206Y5000471K	1206Y5000471KXKT	470	500	10	.60	.36	.32	2500	.158
843-1206Y2K00102K	1206Y2K00102KXKT	1000	2000	10	.74	.45	.40	2500	.197
843-1206Y1K00102K	1206Y1K00102KXKT	1000	1000	10	.72	.44	.39	2500	.191
843-1206Y6300102K	1206Y6300102KXKT	1000	630	10	.62	.38	.33	2500	.164
843-1206Y5000102K	1206Y5000102KXKT	1000	500	10	.60	.36	.32	2500	.158
843-1206Y1K00272K	1206Y1K00272KXKT	2700	1000	10	.82	.50	.44	2500	.216
843-1206Y1K00472K	1206Y1K00472KXKT	4700	1000	10	.86	.52	.46	2500	.228
843-1206Y6300472K	1206Y6300472KXKT	4700	630	10	.78	.47	.42	2500	.206
843-1206Y6300103K	1206Y6300103KXKT	.01µF	630	10	.88	.54	.47	2500	.234
843-1206Y5000103K	1206Y5000103KXKT	.01µF	500	10	.66	.40	.35	2500	.173
843-1206Y5000223K	1206Y5000223KXKT	.022µF	500	10	.76	.46	.41	2500	.20
843-1206Y5000333K	1206Y5000333KXKT	.033µF	500	10	.88	.54	.47	2500	.234
843-1206Y2000473K	1206Y2000473KXKT	.047µF	200	10	1.10	.67	.59	2500	.29
843-1206Y2000104K	1206Y2000104KXKT	.1µF	200	10	1.21	.74	.65	2500	.321
843-1206Y1000104K	1206Y1000104KXKT	.1µF	100	10	1.00	.61	.53	2500	.264
843-1206Y0500104K	1206Y0500104KXKT	.1µF	50	10	.63	.38	.34	2500	.165
843-1206Y0500474K	1206Y0500474KXKT	.47µF	50	10	1.35	.82	.72	2500	.357
843-1206Y0160105K	1206Y0160105KXKT	1µF	16	10	1.64	1.00	.88	2500	.435

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MOUSER STOCK NO.	Syfer Part No.	Value (pF)	Volt (DC)	Tol. (%)	Price Each			Reel Qty.	Price Per Piece
					1	50	100		
<b>Style 1210-Temperature Coeff. X7R</b>									
843-1210Y5000222K	1210Y5000222KXKT	2200	500	10	.95	.58	.51	2000	.252
843-1210Y1K00103K	1210Y1K00103KXKT	.01µF	1000	10	1.42	.86	.76	2000	.376
843-1210Y5000103K	1210Y5000103KXKT	.01µF	500	10	.97	.59	.52	2000	.258
843-1210Y1K00153K	1210Y1K00153KXKT	.015µF	1000	10	1.70	1.03	.91	2000	.448
843-1210Y5000473K	1210Y5000473KXKT	.047µF	500	10	1.33	.81	.71	2000	.352
843-1210Y5000683K	1210Y5000683KXKT	.068µF	500	10	1.48	.90	.79	2000	.391
843-1210Y5000104K	1210Y5000104KXKT	.1µF	500	10	1.67	1.02	.90	2000	.443
843-1210Y2000184K	1210Y2000184KXKT	.18µF	200	10	2.19	1.33	1.17	2000	.579
<b>Style 1808-Temperature Coeff. X7R</b>									
843-1808Y3K00101K	1808Y3K00101KXKT	100	3000	10	1.56	.95	.84	1500	.413
843-1808Y3K00102K	1808Y3K00102KXKT	1000	3000	10	1.41	.86	.76	1500	.373
843-1808Y2K00102K	1808Y2K00102KXKT	1000	2000	10	1.26	.77	.68	1500	.333
843-1808Y2K00222K	1808Y2K00222KXKT	2200	2000	10	1.58	.96	.85	1500	.419
<b>Style 1812-Temperature Coeff. X7R</b>									
843-1812Y3K00681K	1812Y3K00681KXKT	680	3000	10	2.57	1.56	1.20	1000	.734
843-1812Y2K00102K	1812Y2K00102KXKT	1000	2000	10	2.39	1.45	1.20	1000	.682
843-1812Y3K00222K	1812Y3K00222KXKT	2200	3000	10	2.82	1.71	1.33	1000	.806
843-1812Y2K00222K	1812Y2K00222KXKT	2200	2000	10	2.39	1.45	1.20	1000	.682
843-1812Y1K00103K	1812Y1K00103KXKT	.01µF	1000	10	2.57	1.56	1.20	1000	.734
843-1812Y1K00223K	1812Y1K00223KXKT	.022µF	1000	10	2.86	1.73	1.35	1000	.816
843-1812Y1K00333K	1812Y1K00333KXKT	.033µF	1000	10	3.09	1.87	1.45	1000	.882
843-1812Y1K00473K	1812Y1K00473KXKT	.047µF	1000	10	3.99	2.42	1.88	1000	1.14
843-1812Y5000473K	1812Y5000473KXKT	.047µF	500	10	2.23	1.35	1.14	1000	.637
843-1812Y5000104K	1812Y5000104KXKT	.1µF	500	10	3.05	1.85	1.44	1000	.872
843-1812Y5000124K	1812Y5000124KXKT	.12µF	500	10	3.30	2.01	1.56	1000	.944
843-1812Y5000224K	1812Y5000224KXKT	.22µF	500	10	3.81	2.32	1.80	1000	1.09
843-1812Y2000224K	1812Y2000224KXKT	.22µF	200	10	3.68	2.23	1.73	1000	1.05
843-1812Y5000274K	1812Y5000274KXKT	.27µF	500	10	4.40	2.67	2.07	1000	1.26
843-1812Y2000274K	1812Y2000274KXKT	.27µF	200	10	3.99	2.42	1.88	1000	1.14
843-1812Y1000105K	1812Y1000105KXKT	1µF	100	10	4.47	3.54	2.95	1000	2.07
843-1812Y0500105K	1812Y0500105KXKT	1µF	50	10	4.31	2.62	2.03	1000	1.23
<b>Style 2220-Temperature Coeff. X7R</b>									
843-2220Y1K00104K	2220Y1K00104KXKT	.1µF	1000	10	4.88	3.86	3.22	1000	2.25
843-2220Y5000104K	2220Y5000104KXKT	.1µF	500	10	3.59	2.84	2.37	1000	1.66
843-2220Y5000224K	2220Y5000224KXKT	.22µF	500	10	4.70	3.71	3.10	1000	2.17
843-2220Y1000105K	2220Y1000105KXKT	1µF	100	10	6.29	4.97	4.15	1000	2.91

