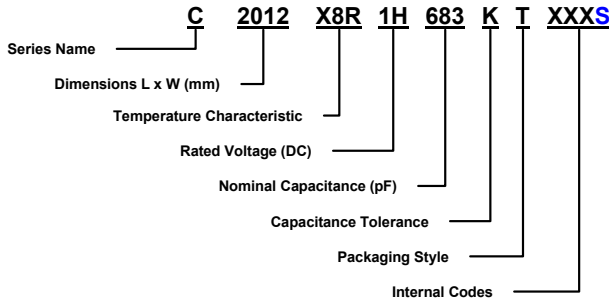
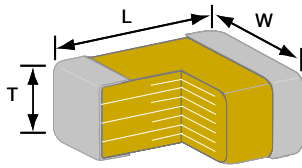


Illustration



Dimensions

Case	Length (mm)	Width (mm)	MaxThickness (mm)
C2012 (0805)	2.00 ± 0.20	1.25 ± 0.20	1.45
C3216 (1206)	3.20 ± 0.20	1.60 ± 0.20	1.80
C3225 (1210)	3.20 ± 0.20	2.50 ± 0.30	2.80
C4532 (1812)	4.50 ± 0.40	3.20 ± 0.40	2.50
C5750 (2220)	5.70 ± 0.40	5.70 ± 0.40	3.10

Features

- Improved bending resistance (Board Flex Resistance)
- Improved temperature cycle performance
- Soft termination is available for most TDK MLCC product lines (up to C3225 case size) and including the 2-in-1 Cap Array line
- RoHS, WEE, and REACH compliant

Applications

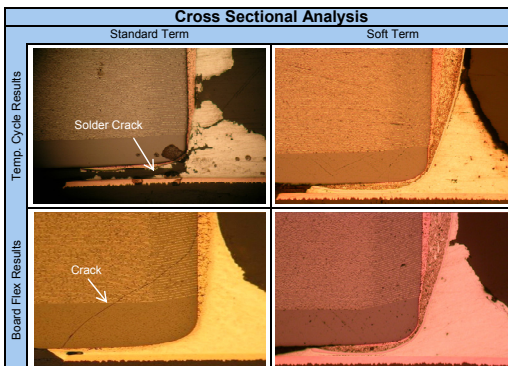
- Automotive powertrain control unit / sensor module
- Switching power supply
- Telecom base station
- Electronic circuits mounted on alumina substrate
- SMT application which requires bending robustness
- Pb-free solder application in which solder joint reliability is problematic

Capacitance Range

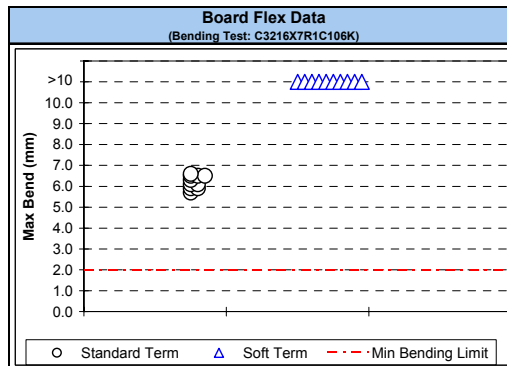
Capacitance	C2012 (0805)						C3216 (1206)						C3225 (1210)					C4532 (1812)			C5750 (2220)					
	450V (2W)	250V (2E)	100V (2A)	50V (1H)	35V (1V)	16V (1C)	630V (2J)	450V (2W)	250V (2E)	100V (2A)	50V (1H)	35V (1V)	25V (1E)	630V (2J)	450V (2W)	250V (2E)	100V (2A)	50V (1H)	630V (2J)	450V (2W)	250V (2E)	630V (2J)	450V (2W)	250V (2E)	100V (2A)	
10 nF	X7T	X7R					X7R																			
22 nF	X7T	X7R					X7R																			
47 nF	X7T	X7T					X7T						X7R													
100 nF		X7T					X7T	X7R					X7T		X7R											
220nF			X7S					X7T						X7T	X7R						X7T					
470nF			X7S	X7R					X7R												X7T	X7R		X7T		
1,0 uF			X7S	X7R					X7R	X7R													X7T		X7T	
2,2 uF				X7R					X7S	X7R														X7T	X7R	
4,7 uF					X7R						X7R					X7S	X7S									
10 uF												X7R						X7S								X7S

Additional Information

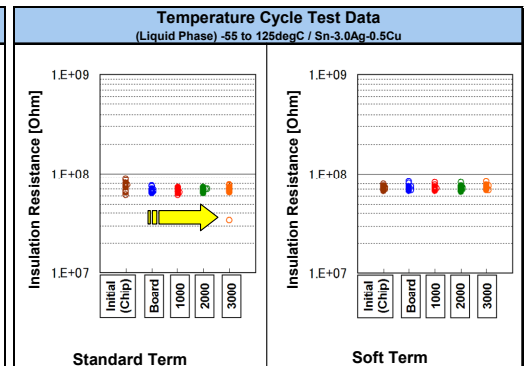
MLCC Construction				
Cross Section	No.	Name	Material	
			Standard Term	Soft Term
	1	Dielectric	BaTiO ₃	BaTiO ₃
	2	Inner Electrode	Ni	Ni
	3	Terminal Electrode	Cu	Cu
	4		---	Conductive Resin
	5		Ni	
	6		Sn	



• Excessive board bending during PCB manufacturing or final assembling is common, and the brittle nature of ceramic components is especially prone to damage after being soldered to the PCB. TDK has expanded line of board flex solutions by introducing soft termination capacitor with a conductive resin terminal layer that protects the ceramic body by absorbing external stress. Soft term caps are also good protection from brittle solder fillets when using Pb-free solder.



• Bending test result shows high performance.



• Soft Termination offers superior performance to standard termination in temperature cycle test.