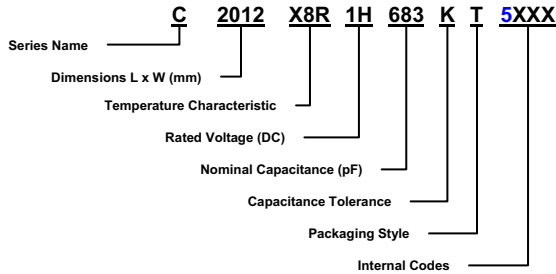
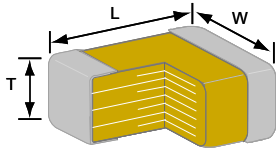


Illustration



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

- Increase resistance to mechanical bending, temperature cycle, vibration, and electrical stresses
- Wider distance between the end of the opposite electrode and the termination
- Reduces the risk of short circuit failures
- X7R and X8R temperature ranges

Applications

- Automotive and other high stress applications
- Battery line circuit with high board flex stress

Capacitance Range

Capacitance	C2012 (0805)				C3216 (1206)				C3225 (1210)					C4532 (1812)					C5750 (2220)								
	250V (2E)	100V (2A)	50V (1H)		630V (2J)	250V (2E)	100V (2A)	16V (1C)	630V (2J)	250V (2E)	100V (2A)	50V (1H)	25V (1E)	16V (1C)	630V (2J)	250V (2E)	100V (2A)	50V (1H)	25V (1E)	16V (1C)	630V (2J)	250V (2E)	100V (2A)	50V (1H)	25V (1E)	16V (1C)	
1.0 nF	X7R	X7R			X7R																						
1.5 nF	X7R	X7R			X7R																						
2.2 nF	X7R	X7R			X7R																						
3.3 nF	X7R	X7R			X7R																						
4.7 nF	X7R	X7R			X7R																						
6.8 nF	X7R	X7R			X7R																						
10 nF	X7R	X7R			X7R																						
15 nF	X7R	X7R			X7R	X7R																					
22 nF	X7R		X8R		X7R	X7R																					
33 nF			X8R		X7R	X7R	X7R																				
47 nF			X8R		X7R	X7R		X7R																			
68 nF			X8R		X7R	X7R		X7R						X7R													
100 nF			X7R		X7R	X7R		X7R					X7R	X7R													
150nF						X7R		X7R					X7R	X7R							X7R						
220nF								X7R					X7R	X7R							X7R						
330nF									X7R				X7R	X7R							X7R						
470nF										X7R			X7R	X7R							X7R						
680nF											X7R		X7R	X7R							X7R						
1.0 uF						X7R						X7R		X7R							X7R						
1.5 uF												X7R		X7R							X7R						
2.2 uF									X7R			X7R		X7R							X7R						
3.3 uF										X7R			X7R								X7R						
4.7 uF							X7R					X7R		X7R							X7R						
6.8 uF													X7R	X7R							X7R						X7R
10 uF														X7R							X7R						X7R
15 uF																					X7R						X7R
22 uF																					X7R						X7R

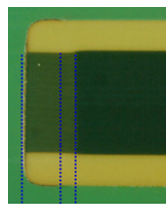
Additional Information

• When a chip capacitor is cracked by mechanical stress such as board bending, open mode construction helps users to reduce the risk of short circuits.

• The open mode design definition is securing the L-Gap. The L-Gap length shall be secured wider than terminal band width.

L Gap > Terminal band width

Terminal band width



< L Gap >
Distance between the end of the opposite electrode and the termination

The "Open mode" concept does not guarantee MLCC will always fail open. This design is intended to reduce the risk of the MLCC failing short. All MLCC caution guidelines apply.

Failure Mode Reference Model

