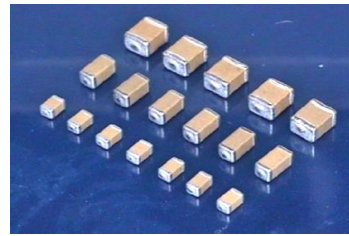


HCT Series

Multilayer Ceramic Chip Capacitors
250V ~ 630V High Voltage & Low DC Bias



Holy Stone high voltage products are designed and manufactured to meet the general requirements of international standards. The X7T product offering is ideally suited for LED driver, lighting, power adapter and USB charger applications where effective capacitance at working voltage is critical to circuit design.

◆ **Features**

- +22/-33% Temperature Coefficient from -55° C to +125° C
- Low DC Bias characteristics
- Low acoustic noise characteristics
- 1206, 1210, 1812 sizes, other sizes and dielectric available upon request

◆ **Applications**

- LED Drivers
- Power Adapters/USB Chargers
- Lighting
- Power Supplies
- General telecommunications equipment

◆ **Summary of Specifications**

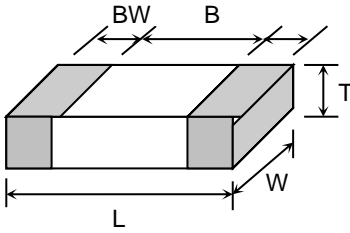
Operation Temperature	-55 to +125 °C
Rated Voltage	250Vdc ~630Vdc
Temperature Coefficient	+22/-33% at -55°C ~+125°C
Capacitance Range	10nF~0.47uF ,other capacitance values available upon request
Dissipation Factor :	2.5% max. at 1KHz 25°C
Insulation Resistance	10GΩ or 500 MΩ·μF min. whichever is smaller
Dielectric Withstanding	1.5xWVDC for 5 sec
Capacitance Tolerance	± 10% , ± 20%,

◆ **How To Order**



Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement
C: MLCC Multilayer Ceramic Capacitor	1206 1210 1812	T: X7T	Example: 103: 10 x 103 104: 10 x 104 224: 22 x 104	Example: J : +/- 5% K : +/-10% M: +/-20%	Example: 251 : 250Vdc 451 : 450Vdc 631 : 630Vdc	T: T/R 7" R: T/R 13" B: Bulk	Example: O: Arc Prevention Coating X: Polymer Termination (Super Term) Z: Arc coating and Polymer Termination

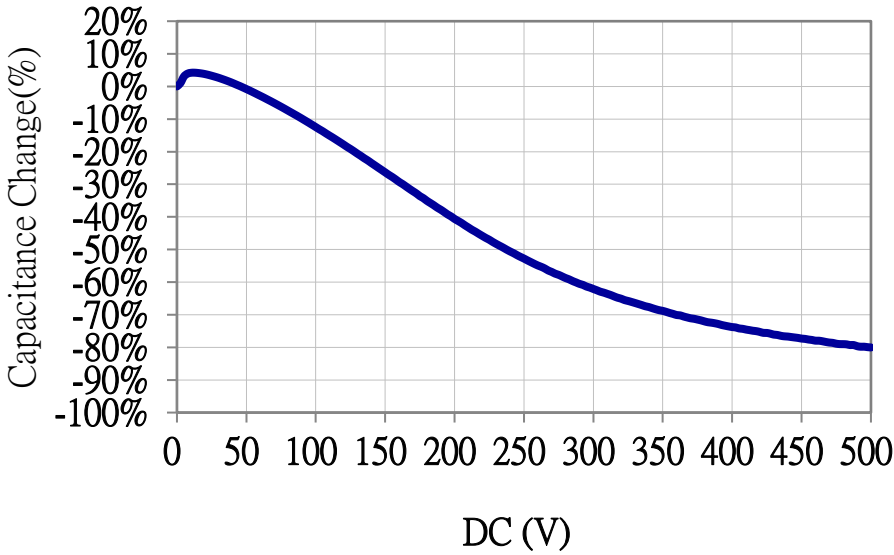
◆ Dimensions



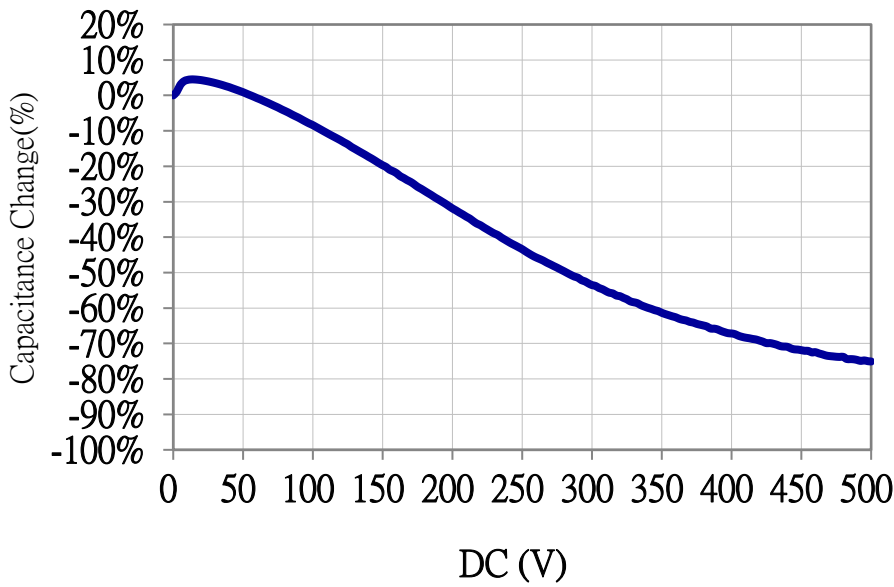
SIZE	L	W	T (max)	B (min)	BW (min)
1206	3.20±0.30 [.126±.012]	1.60±0.20 [.126±.012]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20±0.30 [.126±.012]	2.50±0.20 [.126±.012]	2.60 [.102]	1.60 [.059]	0.30 [.012]
1812	4.60±0.30 [.181±.012]	3.20±0.30 [.126±.012]	3.00 [.118]	2.50 [.098]	0.30 [.012]
2220	5.7±0.40 [.220±.016]	5.00±0.40 [.197±.016]	3.00 [.118]	3.50 [.137]	0.30 [.012]

◆ Capacitance Range (preferred values)

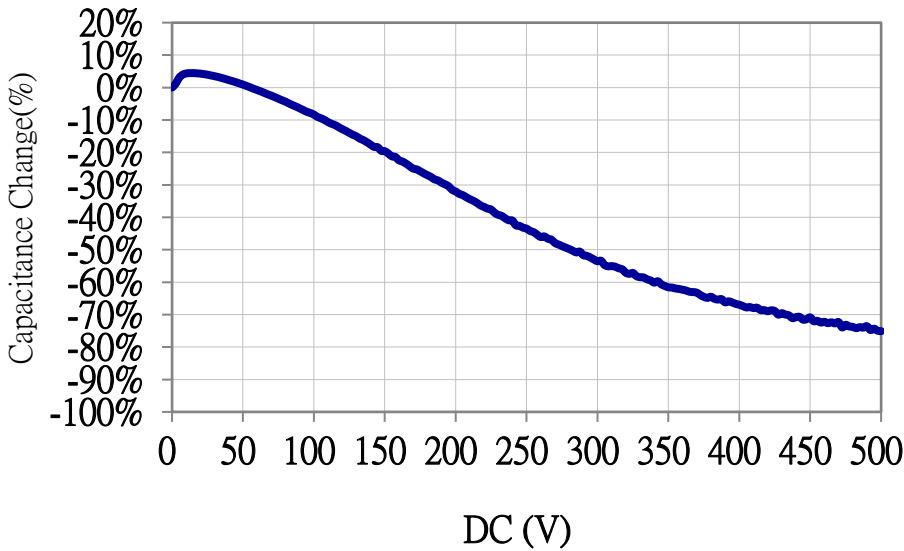
Temperature Characteristic	Voltage	Size	EIA Capacitance Code																				
			103	123	153	183	223	273	333	393	473	563	683	823	104	154	224	334	394	474	684		
X7T	250V	1206															F						
		1210																	F				
		1812																					
	450V	1206											F		E								
		1210																F					
		1812																	F			G	
630V	1206	B		B		C		D		E													
	1210														E	F							



C1812T334K451T
DC Bias Characteristics
(typical)



C1210T154K631T
DC Bias Characteristics
(typical)



C1206T473K631T
DC Bias Characteristics
(typical)