

Multilayer Ceramic Capacitors
16V ~ 100V High Capacitance
HCE Series



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

◆ **Features**

- +/-15% Temperature Coefficient from -55° C to +125° C
- Excellent DC Bias characteristics
- Small Size & Large Capacity Capacitor

◆ **Applications**

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

◆ **Summary of Specifications**

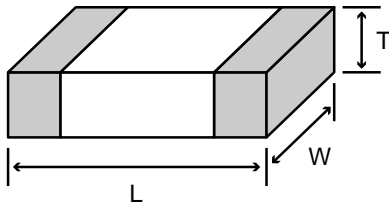
Operation Temperature	-55 °C to +125 °C
Rated Voltage	16Vdc to 100Vdc
Temperature Coefficient	X7R : ±15% at -55 °C to +125 °C
Capacitance Range	1.0uF~22uF ,other capacitance values available upon request
Dissipation Factor	5% when V=100V ; 10% when V=6.3V-50V (at 1KHz 25 °C)
Insulation Resistance	V≤10V 100/CΩ ; V>10V 500/CΩ (C in Farads)
Dielectric Withstanding	200% of the rated voltage from 1 to 5 seconds. (Rated voltage ≤ 100V)
Capacitance Tolerance	± 10% , ± 20%
Aging	typically 1%

◆ **How To Order**

HCE	1206	X	475	K	050	T	X	Y
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement	Suffix Code
HCE: Excellent DC Bias MLCC	Ex.: 0603 0805 1206 1210	Ex.: X : X7R	Ex.: 105 : 10x10 ⁵ 106 : 10x10 ⁶ 226 : 22x10 ⁶	Ex.: K : +/-10% M : +/-20%	Ex.: 016 : 16Vdc 025 : 25Vdc 035 : 35Vdc 050 : 50Vdc 101 : 100Vdc	Ex.: T: T&R 7" R: T&R 13"	Ex.: X: Polymer Termination (Super Term)	Y

Unit : mm

◆ Dimensions



SIZE	L	W	T	Dimension Code
0603	1.60±0.15	0.80±0.15	0.85±0.15	B1
0805	2.00±0.20	1.25±0.20	1.25±0.20	D
0805	2.00+0.45/-0.02	1.25±0.25	1.25±0.25	D1
1206	3.20±0.30	1.60±0.20	1.60±0.20	E1
1210	3.20±0.30	2.50±0.20	2.00±0.20	F
1210	3.20±0.40	2.50±0.30	2.50±0.30	G2

◆ Capacitance Range (preferred values)

Temperature Characteristic	Size	Rated Voltage	Capacitance Range (pF)												
			104	224	334	474	684	105	225	335	475	106	226		
X7R	0603	16V							B1						
		25V							B1						
		35V							B1						
	0805	16V											D1		
		25V											D1		
		35V											D1		
		50V							D	D					
		100V							D						
	1206	50V											E1		
		100V							E1	E1					
	1210	16V													G2
		25V													G2
		50V											G2		
		100V								F		F			