

Multilayer Ceramic Capacitors
6.3V ~ 100V High Capacitance(2.2uF and above)
HCD Series



Holy Stone high capacitance products are designed and manufactured to meet the general requirements of international standards. The HCD product offering is ideally suited for server power, USB PD charger, micro PV inverter, Power over Ethernet, and power tools applications where effective capacitance at working voltage is critical to circuit design.

◆ **Features**

- ❑ ±15% Temperature Coefficient from -55° C to +125° C
- ❑ Low Bias characteristics
- ❑ Small Size & Large Capacity Capacitor

◆ **Applications**

- ❑ Server Power (12V and 48V)
- ❑ USB 3.1 PD Chargers (20V, 28V, 36V and 48V)
- ❑ Micro PV Inverter
- ❑ Power Supplies
- ❑ General Telecommunications Equipment / PoE (48V)
- ❑ Power Tools (12V, 18V, 24V, 28V and 48V)

◆ **Summary of Specifications**

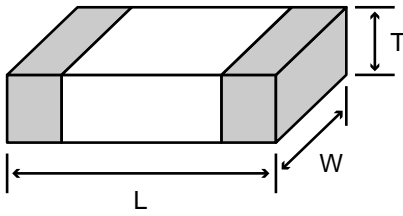
Operation Temperature	-55 °C to +125 °C
Rated Voltage	6.3Vdc to 100Vdc
Temperature Coefficient	X7R : ±15% at -55 °C to +125 °C
Capacitance Range	2.2uF~22uF ,other capacitance values available upon request
Dissipation Factor	2.5% max. at 1KHz 25 °C
Insulation Resistance	V≤10V 100/CΩ ; V>10V 500/CΩ (C in Farads)
Dielectric Withstanding	150%-200% of the rated voltage from 1 to 5 seconds. (Rated voltage ≤ 100V)
Capacitance Tolerance	± 10% , ± 20%
Aging	typically 1%

◆ **How To Order**

HCD	1206	X	106	K	025	T	X	Y
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement	Suffix Code
HCD: Low Bias MLCC	Ex.: 1206 1210	Ex.: X : X7R	Ex.: 225 : 22x10 ⁵ 335 : 33x10 ⁵ 475 : 47x10 ⁵ 106 : 10x10 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

◆ Dimensions

Unit : mm



SIZE	L	W	T	Dimension Code
1206	3.20± 0.30	1.60± 0.20	1.60± 0.20	E2
1206	3.20± 0.40	1.60± 0.30	1.60± 0.30	E4
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	1206	10V											E4	
		16V											E4	
		25V											E4	
		35V											E4	
		50V										E2		
	100V							E2	E2					
	1210	25V												G2
		50V											G2	
		100V									F			