

## Multilayer Ceramic Capacitors 6.3V ~ 25V High Capacitance (0.1uF and above) HCH Series



Holy Stone offer high capacitance product line ranging from compact (0.6x0.3mm) to large (3.2x1.6mm) for a variety of temperature characteristics, packages and rated voltages.

### ◆ Features

- ❑ Materials with general purpose dielectric for Ceramic Capacitors
- ❑ Small size & high capacitance values
- ❑ 125°C max, special temperature characteristics

### ◆ Applications

- ❑ General and specialized applications
- ❑ 5G Base Station

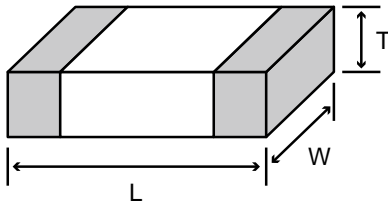
### ◆ Summary of Specifications

Operation Temperature	X7R : -55 °C to +125 °C
Rated Voltage	6.3Vdc to 25Vdc
Temperature Coefficient	X7R : ±15% at -55 °C to +125 °C (Not EIA) Range of capacitance change rate is specified with 50% of rated voltage.
Dissipation Factor	10% max. at 1KHz 25°C
Insulation Resistance	V≤10V 100/CΩ ; V>10V 500/CΩ (C in Farads)
Dielectric Withstanding	250% of the rated voltage from 1 to 5 seconds. (Rated voltage ≤ 25V)
Capacitance Tolerance	± 10% , ± 20%
Aging	typically 1%

### ◆ How To Order

HCH	0201	X	104	K	016	T	X	Y
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement	Suffix Code
HCH: High Capacitance MLCC	Ex.: 0201 0402 0603 0805 1206	Ex.: X : X7R	Ex.: 104 : 10x10 <sup>4</sup> 105 : 10x10 <sup>5</sup> 106 : 10x10 <sup>6</sup> 226 : 22x10 <sup>6</sup>	Ex.: K : +/-10% M : +/-20%	Ex.: 007 : 6.3Vdc 010 : 10Vdc 016 : 16Vdc 025 : 25Vdc	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
0201	0.60±0.05	0.60±0.05	0.30±0.05	S1
0201	0.60±0.09	0.60±0.09	0.30±0.09	S2
0402	1.00±0.20	0.50±0.20	0.50±0.20	W
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/-0.20	1.25±0.25	1.25±0.25	D1
1206	3.20±0.30	1.60±0.20	1.60±0.20	E1
1206	3.20±0.40	1.60±0.30	1.60±0.30	E4

## ◆ Capacitance Range (preferred values)

Temperature Characteristic	Size	Rated Voltage	Capacitance Range (pF)										
			104	224	334	474	684	105	225	335	475	106	226
X7R ※	0201	6.3V	S1										
		10V	S2										
		16V											
	0402	6.3V						W					
		10V						W					
		16V											
	0603	10V			B1	B1					C		
		16V											
		25V		B1				B1	B1				
	0805	6.3V										D	
		10V										D	
		16V									D1		
		25V									D1		
	1206	6.3V											E4
		10V										E1	
		16V										E1	
		25V										E1	

※(Range of capacitance change rate is specified with 50% of rated voltage )