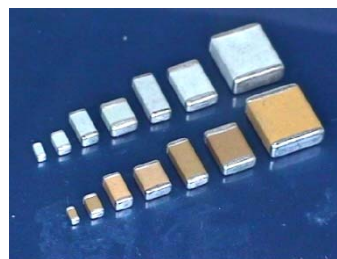


## Multilayer Ceramic Chip Capacitors [ High Voltage Capacitor ]

### HVC Series



**Holy Stone** high voltage products are designed and manufactured to meet the general requirements of international standards.

The product offering is well suited for commercial and industrial applications and includes C0G (NP0), SL and X7R characteristics in sizes 0603 to 2225 and with working voltages up to 5KV.

#### ◆ Features

- ❑ Special internal electrode design offers the highest voltage rating
- ❑ Surface mount suited for solder wave and reflow soldering
- ❑ High reliability
- ❑ RoHS compliant

#### ◆ Applications.

- ❑ Suitable for LAN/WLAN interface, Back-Lighting Inverter ,DC-DC Converters, Ballast, Modems & Power Supplies.

#### ◆ Summary of Specification

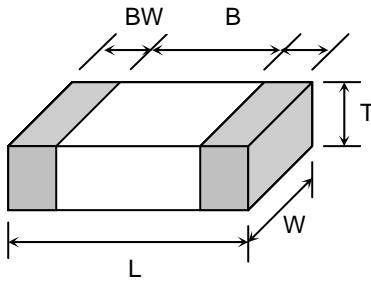
Operation Temperature	-55~+125 °C
Rated Voltage	100Vdc to 5000Vdc
Temperature Coefficient	NP0 : $\leq \pm 30$ ppm/ °C , -55~+125 °C (EIA Class I )
	X7R : $\leq \pm 15\%$ , -55~+125 °C (EIA Class II )
	SL : $\leq +350/-1000$ ppm/ °C , -25~+85 °C (EIA Class I)
Dissipation Factor :	NP0/SL : $Q \geq 1000$ ; X7R : D.F. $\leq 2.5\%$
Insulation Resistance	10G $\Omega$ or 500/C $\Omega$ whichever is smaller
Ageing	NP0/SL:0% ; X7R: Typically 1.0% per decade of time
Dielectric Strength	100V $\leq$ V < 500V : 200% Rated Voltage
	500V $\leq$ V < 1000V : 150% Rated Voltage
	1000V $\leq$ V : 120% Rated Voltage

#### ◆ How To Order



Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement
C: MLCC (Multilayer Ceramic Chip of Capacitor)	EX.: 0603 0805 1206 1210 1808 1812 2220 2225	Ex.: N: NP0 L : SL X: X7R	Ex.: 2R0:2.0pF 100:10 $\times$ 10 <sup>0</sup> 471:47 $\times$ 10 <sup>1</sup> 102:10 $\times$ 10 <sup>2</sup>	Ex.: C:+/-0.25pF D:+/-0.50pF J :+/- 5% K :+/-10% M:+/-20%	Ex.: 101 : 100Vdc 251:250Vdc 501: 500Vdc 631: 630Vdc 102: 1000Vdc 202: 2000Vdc 302: 3000Vdc 402: 4000Vdc 502; 5000Vdc	T: Tape & Reel B: Bulk	Ex.: O: Arc Prevention Coating X: Polymer Termination (Super Term)

◆ Dimension



TYPE	L	W	T (max)	B (min)	BW (min)
0603	1.60±0.1 [.063±.004]	0.80±0.1 [.031 ±.004]	0.90 [.039]	0.40 [.016]	0.15 [.006]
0805	2.00±0.20 [.079±.008]	1.25±0.20 [.049±.008]	1.45 [.057]	0.70 [.028]	0.20 [.008]
1206	3.20±0.30 [.126±.012]	1.60±0.20 [.063±.008]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20±0.30 [.126±.012]	2.50±0.20 [.098±.008]	2.60 [.102]	1.60 [.063]	0.30 [.012]
1808	4.60±0.30 [.181±.012]	2.00±0.20 [.079±.008]	2.20 [.087]	2.50 [.098]	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]
1825	4.6±0.30 [.181±.012]	6.35±0.40 [.250±.016]	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]
2225	5.7±0.40 [.220±.016]	6.35±0.40 [.250±.016]	3.00 [.118]	3.50 [.137]	0.30 [.012]

◆ Capacitance Range – NP0 100Vdc to 1KVdc

Temperature Characteristic	Size	Rated Voltage	Capacitance Range (pF)																																																
			2R0	3R3	3R9	5R0	8R2	100	120	150	180	220	270	330	390	470	560	680	820	101	121	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	392	472	562	682	822	103	123	153	183	223	273	333	393
NP0	0603	100V	B																																																
		200V	B																																																
		250V	B																																																
	0805	100V	B																B																																
		200V	B																B																																
		250V	B																B																																
	1206	100V	B																B																																
		200V	B																B																																
		250V	B																B																																
		500V	B																B																																
		630V	B																B																																
	1210	100V	B																B																																
		200V	B																B																																
		250V	B																B																																
		500V	B																B																																
		630V	B																B																																
	1808	100V	B																B																																
		200V	B																B																																
		250V	B																B																																
		500V	B																B																																
630V		B																B																																	
1812	100V	B																B																																	
	200V	B																B																																	
	250V	B																B																																	
	500V	B																B																																	
	630V	B																B																																	
2220	100V	B																B																																	
	200V	B																B																																	
	250V	B																B																																	
	500V	B																B																																	
	630V	B																B																																	



