

## Multilayer Ceramic Chip Capacitors [ Low-Loss, High Frequency Capacitors ]

### HBC Series



#### ◆ Features

- Low stable ESR at high frequency
- Ultra stable NP0 performance
- Suitable for solder wave and reflow soldering
- RoHS compliant
- High peak to peak voltage capability

#### ◆ Applications

- High frequency pulse circuits
- Lighting ballast snubber circuits
- DC-DC converters
- High dv/dt rating

#### ◆ Summary of Specifications

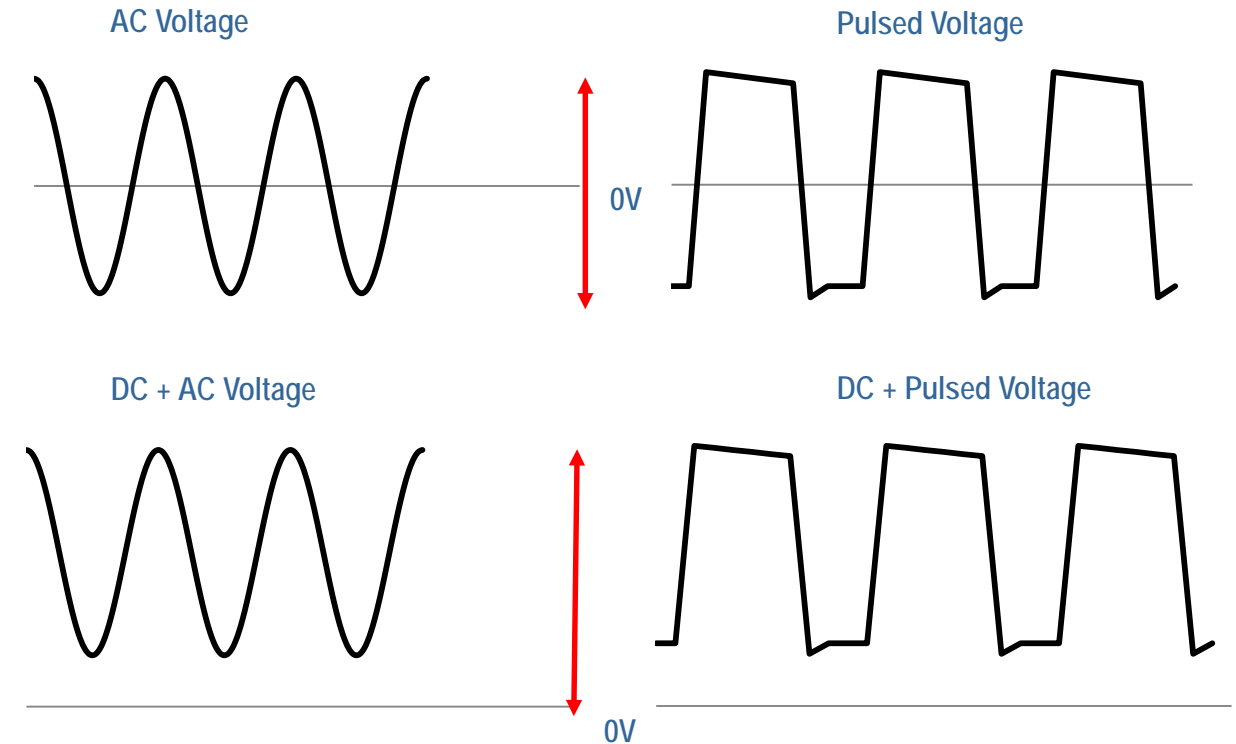
Operation Temperature	-55 °C ~ +125 °C
Rated Voltage	500Vdc, 630Vdc and 1000Vdc
Temperature Coefficient	≤ ± 30ppm at -55 °C ~ +125 °C
Capacitance Range	10pF ~ 2700pF
Dissipation Factor	0.1% max. at 1MHz 25°C
Insulation Resistance	10GΩ
Dielectric Withstanding	500Vdc/630Vdc, 150% of RV: 1000Vdc, 120% of RV for 5 sec
Capacitance Tolerance	±1%, ±2%, ±5%, ±10%
Ageing	None
Piezo Effects	None
dv/dt Rating	>8KV/μ second

#### ◆ How To Order

HBC	1206	N	100	J	501	T	Y
<b>Product Code</b> HBC: Low-Loss High Frequency Capacitor	<b>Chip Size</b> Ex.: 1206 1210	<b>Dielectric</b> N : NP0	<b>Capacitance Unit : pF</b> Ex.: 100 : 10×10 <sup>0</sup> 101 : 10×10 <sup>1</sup> 102 : 10×10 <sup>2</sup>	<b>Tolerance</b> Ex.: F : ± 1% G : ± 2% J : ± 5% K : ± 10%	<b>Rated Voltage</b> Ex.: 501 : 500Vdc 631 : 630Vdc 102 : 1000Vdc	<b>Packaging</b> T: T&R 7" R: T&R 13" B: Bulk	<b>Suffix Code</b>  Y

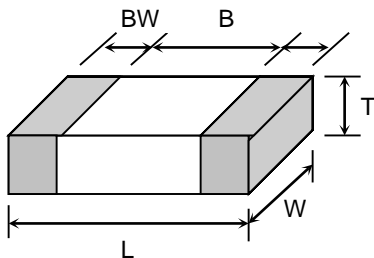
### ◆ Characteristics Peak to Peak Voltage

The maximum Peak to Peak voltage, as defined below, should not exceed the DC voltage rating of the capacitor



↑ = Peak to Peak voltage

### ◆ Dimension



Unit : mm [inch]

TYPE	L	W	T (max)	B (min)	BW (min)
1206	3.20±0.30 [.126±.012]	1.60 ± 0.2 [.063±.008]	1.80 [.071]	1.50 [.059]	0.30 [.012]
1210	3.20±0.30 [.126±.012]	2.50 ± 0.2 [.098±.008]	2.60 [.102]	1.60 [.063]	0.30 [.012]

### ◆ Capacitance Range

Size	Voltage	Capacitance Range																													
		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
1206	500V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
1206	630V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
1206	1000V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
1210	500V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
1210	630V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
1210	1000V	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

■ Other dimensions, capacitance values and voltages rating are available. Please contact Holy Stone.