

Multilayer Ceramic 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 to +125 °C	
Rated Voltage	500Vdc, 630Vdc and 1000Vdc	
Temperature Coefficient	≤ ± 30ppm at -55 °C to +125 °C	
Capacitance Range	10pF ~ 2700pF	
Dissipation Factor	0.1% max. at 1MHz 25 ℃	
Insulation Resistance	10GΩ	
Dielectric Withstanding	1.5 x WVDC for 5 sec	
Capacitance Tolerance	±1%, ±2%, ±5%, ±10%	
Ageing	None	
Piezo Effects	None	
dv/dt Rating	>8KV/µ second	

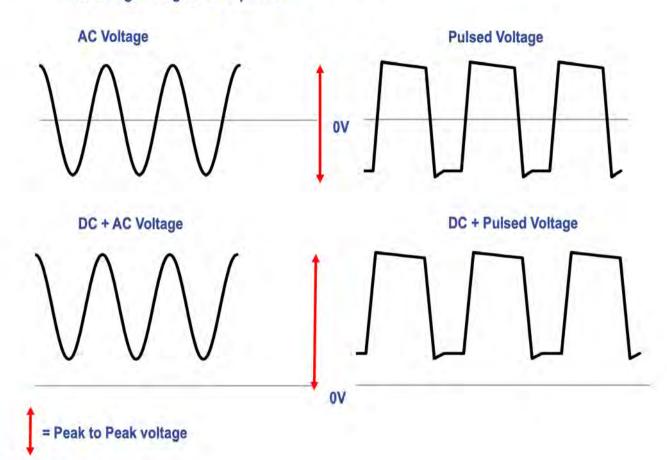
How To Order

Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Thickness (mm) (Optional)	Suffix Code
HBC: Low-Loss High Frequency Capacitor	Ex.: 1206 1210	Ex.: N: NP0	Ex.: 100 : 10x10 ⁰ 101 : 10x10 ¹ 102 : 10x10 ²	Ex.: F:±1% G:±2% J:±5% K:±10%	Ex.: 501 : 500Vdc 631 : 630Vdc 102 : 1000Vdc	Ex.: T: T&R 7" R: T&R 13" B: Bulk	Ex: E:1.60±0.20 F:2.0±0.20	Y

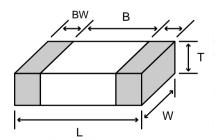


Characteristics Peak to Peak Voltage

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



Dimension



SIZE	L	W	T (max)	B (min)	BW (min)
1000	3.20±0.30	1.60 ± 0.2	1.80	1.50	0.30
1206	[.126±.012]	[.063±.008]	[.071]	[.059]	[.012]
1010	3.20±0.30	2.50 ± 0.2	2.60	1.60	0.30
1210	[.126±.012]	[.098±.008]	[.102]	[.063]	[.012]

Capacitance Range

Size	Jane	Capacitance Range																								
	Voltage	120	180	220	330	390	470	560	820	101	121	151	181	221	271	331	391	471	561	681	821	102	122	152	182	236
1206	500V																									T
1206	630V									Г																
1206	1000V					' '			1	Г																
1210	500V			٠.		٠.			•	Г																- '
1210	630V	Ē.,		•						Г								_								
1210	1000V			•		Τ,				Т			_	_	_		_	_	_	_			_	_		

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

Unit: mm [inch]