

Multilayer Ceramic Chip Capacitors
[Low-loss High Frequency Capacitors]

HBC Series

◆ **Features**

- Low Stable ESR at high frequency
- Ultra stable C0G performance
- Suitable for solder wave and reflow soldering
- ROHS Compliant
- High Peak to Peak Voltage capability

◆ **Application**

- High Frequency Pulse Circuits
- Lighting Ballast Snubber Circuits
- DC-DC Converters
- High dv/dt rating

◆ **Summary of Specification**

Operation Temperature	-55~+125 °C
Rated Voltage	500V and 630Vdc
Temperature Coefficient	≤ ± 30ppm at -55~+125 °C
Capacitance Range	10pF ~ 2700pF
Dissipation Factor :	0.1% max. at 1MHz 25°C
Insulation Resistance	10GΩ
Dielectric Withstanding	1.5 × WVDC for 5 sec
Capacitance Tolerance	F, G, J, K
Ageing	None
Piezo Effects	None
dv/dt rating	>5Kv/μ Second

◆ **How To Order**

HBC
1206
N
100
J
501
T

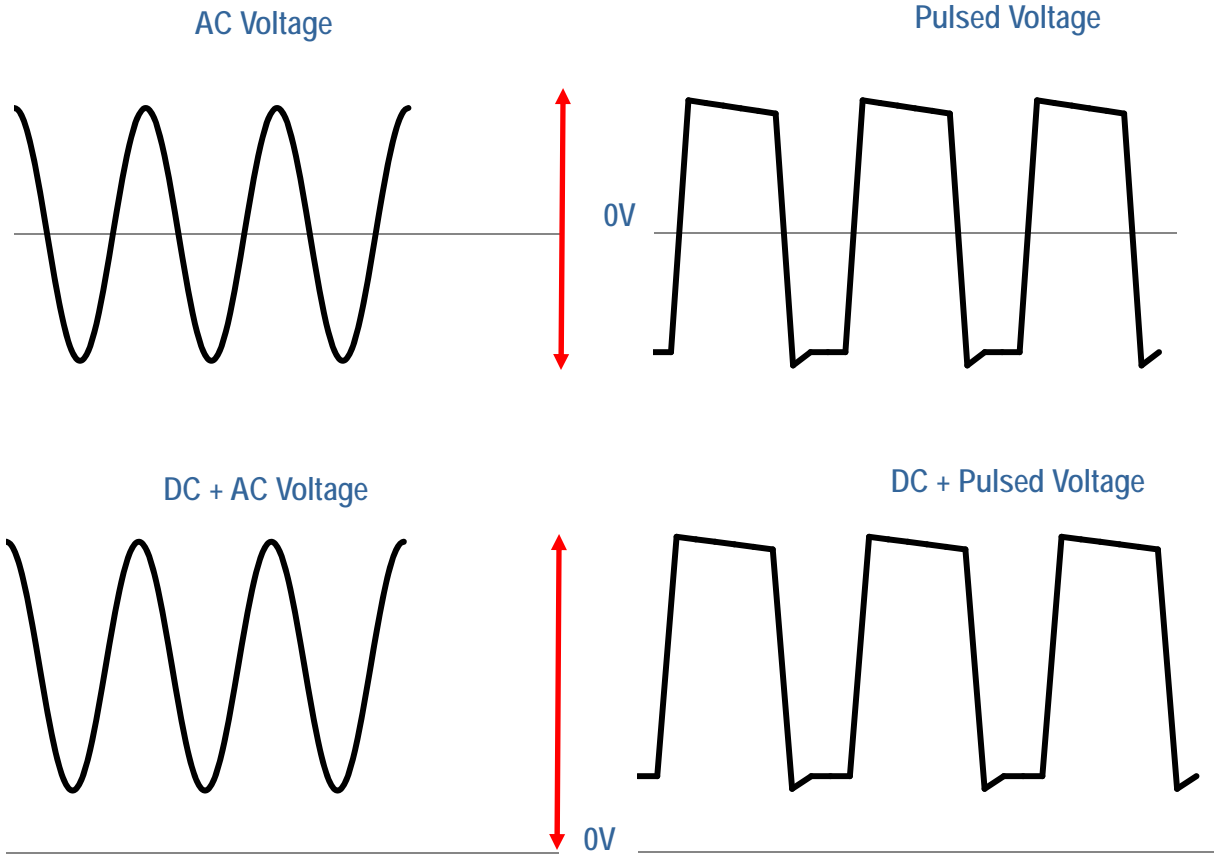
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging
HBC:Low-loss High Frequency Capacitors	1206 : 3.2 × 1.6 mm 1210: 3.2 x 2.5 mm	N: NPO(C0G)	Ex.: 100:10×10 ⁰ 101:10×10 ¹ 102:10×10 ²	Ex.: F: ±1% G: ±2% J: ± 5% K: ±10%	Ex.: 501:500Vdc 631:630Vdc	T: Taping & Reel B: Bulk

◆ **Characteristic Peak to Peak Voltage**

To convert a DC voltage rating to maximum Peak to Peak voltage.

A conversion factor of 1.25:1 should be used.

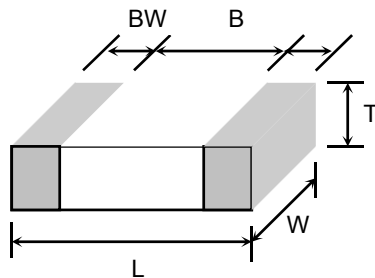
Example: 500VDC rating = $500/1.25 = 400V$ Peak to Peak Voltage, where Peak to peak is defined as below



↑↓ = Peak to Peak voltage

◆ **Dimension**

Unit : mm [inches]



TYPE	L	W	T (max)	B (min)	BW (min)
1206	3.20±0.3	1.60±0.2	1.80	1.50	0.30
1210	3.20±.30	2.50±0.2	2.60	1.60	0.30

◆ Capacitance Range

Capacitance Code	Capacitance Value (pF)	1206		1210	
		500V	630V	500V	630V
100	10				
120	12				
150	15				
180	18				
220	22				
270	27				
330	33				
390	39				
470	47				
560	56				
680	68				
820	82				
101	100				
121	120				
151	150				
181	180				
221	220				
271	270				
331	330				
391	390				
471	470				
561	560				
681	680				
821	820				
102	1000				
122	1200				
152	1500				
182	1800				
222	2200				
272	2700				

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