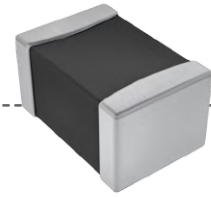


# Multilayer Chip Ferrite Beads—CB Series



Multilayer Chip Ferrite Beads

Large Current Multilayer Chip Ferrite beads

Ferrite Chip Bead Arrays

## FEATURES

- Internal silver printed layers and magnetic shielded structures to minimize crosstalk.
- It has sharp impedance characteristics at desirable frequency and does not affect the signal frequency.
- Three types material and wide range of impedance values for various applications.
- OPERATING TEMP: -55°C ~ +125°C

## APPLICATIONS

- Noise suppression for high speed signal of electric equipments such as computers and peripheral devices, Set-Top-Box, LCD TVs, communication equipments, OAEquipments, etc.

## PRODUCT IDENTIFICATION



01 Type	
ZCB	Chip Ferrite Bead For High Speed

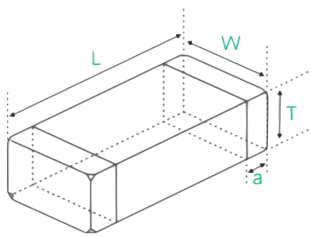
02 External Dimensions (LxW)(mm)	
1005 [0402]	1.0 x 0.5
1608 [0603]	1.6 x 0.8
2012 [0805]	2.0 x 1.25
3216 [1206]	3.2 x 1.6
3225 [1210]	3.2 x 2.5

03 Nominal Impedance	
Example	Nominal value
300	30Ω
121	120Ω
102	1000Ω

04 Packing	
T	Tape & Reel

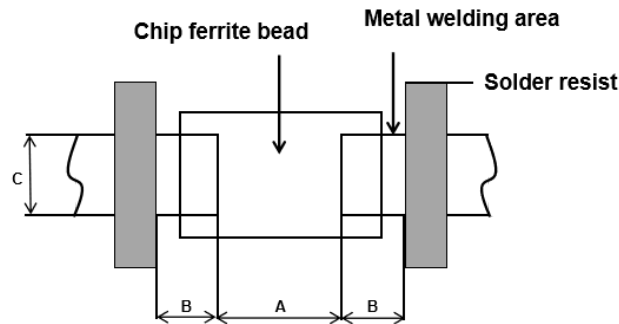
05 Hazardous Substance Free Products	
F	

## SHAPE AND DIMENSIONS



Part Number	Dimensions(mm)			
	L	W	T	a
ZCB1005 [0402]	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1
ZCB1608 [0603]	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
ZCB2012 [0805]	2.0±0.2	1.2±0.2	0.8±0.2	0.4±0.2
			1.2±0.2	
ZCB3216 [1206]	3.2±0.2	1.6±0.2	0.8±0.2	0.5±0.3
			1.1±0.3	
ZCB3225 [1210]	3.2±0.2	2.5±0.2	1.6±0.3	0.5±0.3
			1.3±0.3	

## RECOMMENDED PC BOARD PATTERN



Part Number	Dimensions(mm)		
	A	B	C
ZCB1005	0.35	0.6	0.6
ZCB1608	0.6	1.0	0.8
ZCB2012	1.0	1.0	1.0
ZCB3216	2.2	1.1	1.4
ZCB3225	2.2	1.1	2.2

## SPECIFICATIONS

### ● ZCB1005 TYPE

Part Number	Impedance ( $\Omega$ ) $\pm 25\%$	Impedance Test Frequency (MHz)	Max.DC Resistance ( $\Omega$ )	Rated CurrentMax. (mA)	Thickness
ZCB1005-100	1~15	100/0.05	0.05	500	0.5 $\pm$ 0.15
ZCB1005-310	31 $\pm$ 25%	100/0.05	0.20	300	
ZCB1005-600	60 $\pm$ 25%	100/0.05	0.30	200	
ZCB1005-800	80 $\pm$ 25%	100/0.05	0.30	200	
ZCB1005-121	120 $\pm$ 25%	100/0.05	0.40	200	
ZCB1005-221	220 $\pm$ 25%	100/0.05	0.45	150	
ZCB1005-301	300 $\pm$ 25%	100/0.05	0.50	100	
ZCB1005-421	420 $\pm$ 25%	100/0.05	0.60	100	
ZCB1005-501	500 $\pm$ 25%	100/0.05	0.80	100	
ZCB1005-601	600 $\pm$ 25%	100/0.05	0.90	100	
ZCB1005-751	750 $\pm$ 25%	100/0.05	1.00	100	
ZCB1005-102	1000 $\pm$ 25%	100/0.05	1.20	100	
ZCB1005-152	1500 $\pm$ 25%	100/0.05	1.60	100	

● ZCB1608 TYPE

Part Number	Impedance (Ω) ±25%	Impedance Test Frequency (MHz)	Max.DC Resistance (Ω)	Rated CurrentMax. (mA)	Thickness
ZCB1608-110	1~15	100/0.05	0.05	2000	0.8±0.15
ZCB1608-300	30±25%	100/0.05	0.08	2000	
ZCB1608-600	60±25%	100/0.05	0.10	500	
ZCB1608-800	80±25%	100/0.05	0.15	400	
ZCB1608-101	100±25%	100/0.05	0.20	300	
ZCB1608-121	120±25%	100/0.05	0.20	300	
ZCB1608-221	220±25%	100/0.05	0.30	300	
ZCB1608-301	300±25%	100/0.05	0.35	200	
ZCB1608-471	470±25%	100/0.05	0.45	200	
ZCB1608-601	600±25%	100/0.05	0.45	200	
ZCB1608-751	750±25%	100/0.05	0.50	200	
ZCB1608-102	1000±25%	100/0.05	0.60	200	
ZCB1608-152	1500±25%	100/0.05	0.70	150	
ZCB1608-182	1800±25%	100/0.05	0.90	100	
ZCB1608-202	2000±25%	100/0.05	1.20	100	
ZCB1608-222	2200±25%	100/0.05	1.20	100	

● ZCB2012 TYPE

Part Number	Impedance (Ω) ±25%	Impedance Test Frequency (MHz)	Max.DC Resistance (Ω)	Rated CurrentMax. (mA)	Thickness
ZCB2012-070	1~15	100/0.05	0.04	2000	0.8±0.15
ZCB2012-190	19±25%	100/0.05	0.04	2000	
ZCB2012-300	30±25%	100/0.05	0.05	1500	
ZCB2012-800	80±25%	100/0.05	0.10	1000	
ZCB2012-121	120±25%	100/0.05	0.15	800	
ZCB2012-181	180±25%	100/0.05	0.18	700	
ZCB2012-221	220±25%	100/0.05	0.20	600	
ZCB2012-301	300±25%	100/0.05	0.20	500	
ZCB2012-421	420±25%	100/0.05	0.30	500	

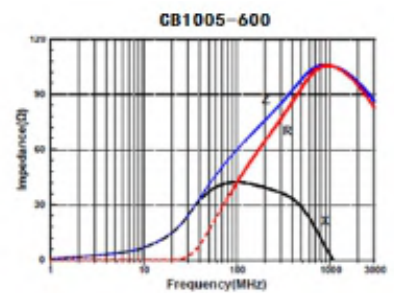
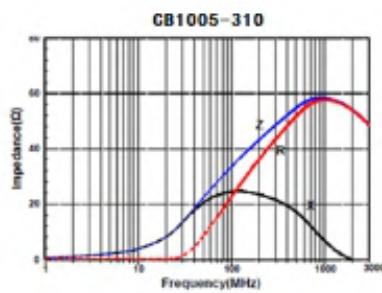
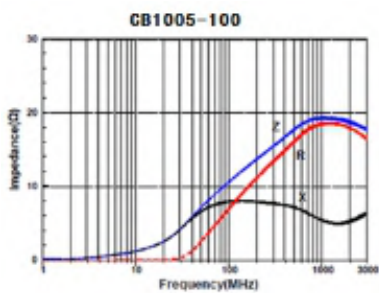
Part Number	Impedance ( $\Omega$ ) $\pm 25\%$	Impedance Test Frequency (MHz)	Max.DC Resistance ( $\Omega$ )	Rated CurrentMax. (mA)	Thickness
ZCB2012-501	500 $\pm 25\%$	100/0.05	0.30	500	0.8 $\pm 0.15$
ZCB2012-601	600 $\pm 25\%$	100/0.05	0.30	500	
ZCB2012-751	750 $\pm 25\%$	100/0.05	0.35	500	
ZCB2012-102	1000 $\pm 25\%$	100/0.05	0.35	500	
ZCB2012-152	1500 $\pm 25\%$	100/0.05	0.60	300	
ZCB2012-202	2000 $\pm 25\%$	100/0.05	0.80	200	

● ZCB3216 TYPE

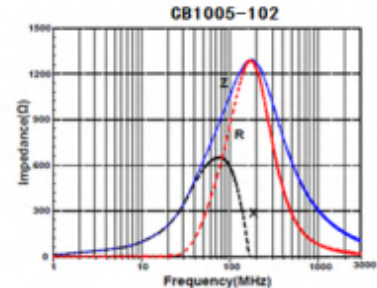
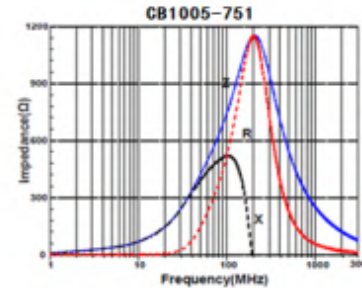
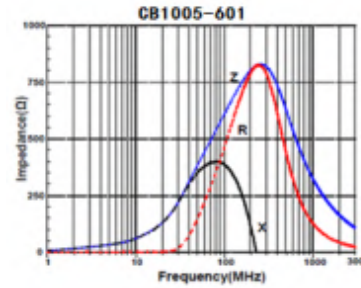
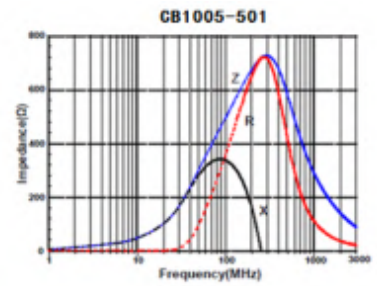
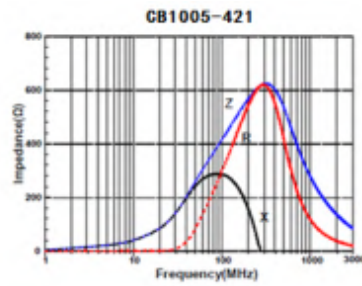
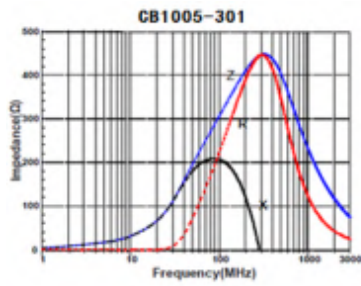
Part Number	Impedance ( $\Omega$ ) $\pm 25\%$	Impedance Test Frequency (MHz)	Max.DC Resistance ( $\Omega$ )	Rated CurrentMax. (mA)	Thickness
ZCB3216-000	1~15	100/0.05	0.03	2200	0.8 $\pm 0.2$
ZCB3216-310	31 $\pm 25\%$	100/0.05	0.05	2000	
ZCB3216-600	60 $\pm 25\%$	100/0.05	0.10	1000	
ZCB3216-800	80 $\pm 25\%$	100/0.05	0.10	1000	
ZCB3216-121	120 $\pm 25\%$	100/0.05	0.10	1000	
ZCB3216-221	220 $\pm 25\%$	100/0.05	0.20	600	
ZCB3216-301	300 $\pm 25\%$	100/0.05	0.20	600	
ZCB3216-501	500 $\pm 25\%$	100/0.05	0.30	600	
ZCB3216-601	600 $\pm 25\%$	100/0.05	0.30	600	
ZCB3216-102	1000 $\pm 25\%$	100/0.05	0.60	500	
ZCB3216-122	1200 $\pm 25\%$	100/0.05	0.60	300	

DETAIL ELECTRICAL CHARACTERISTICS

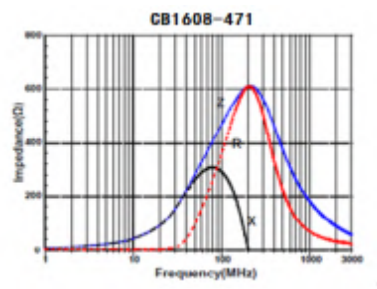
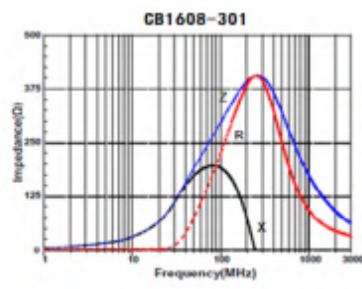
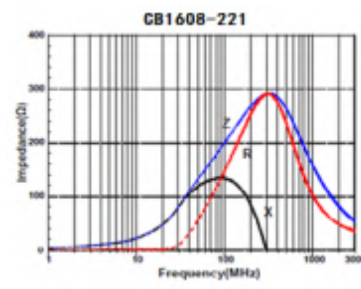
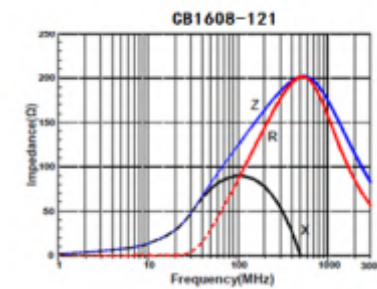
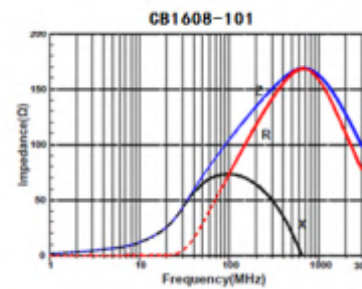
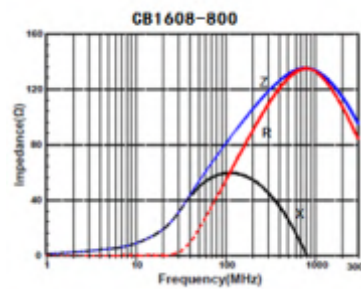
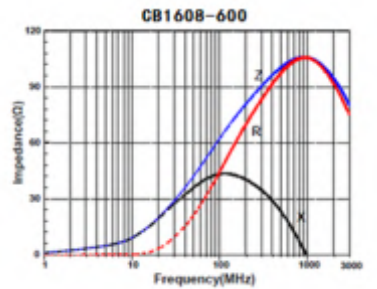
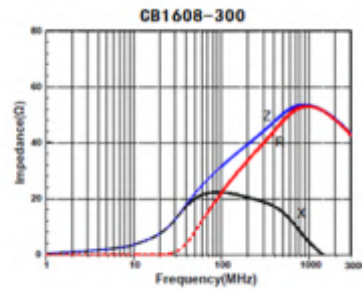
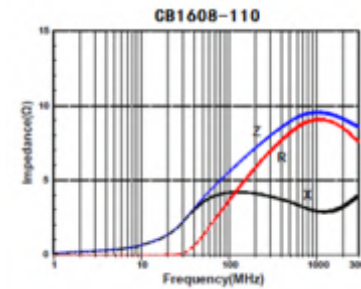
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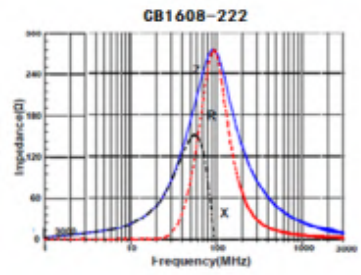
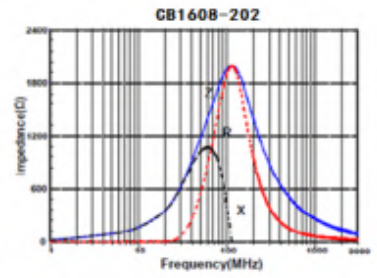
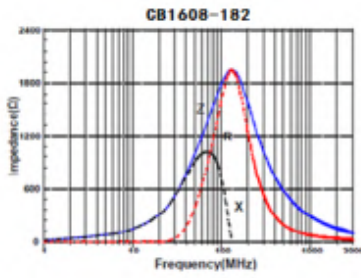
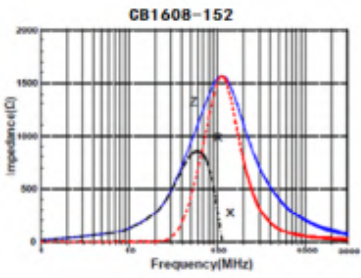
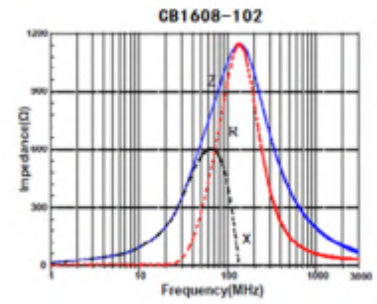
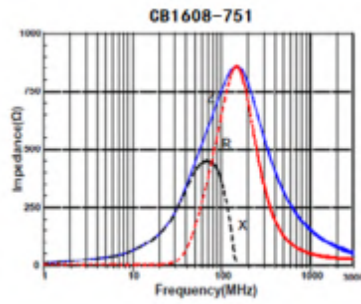
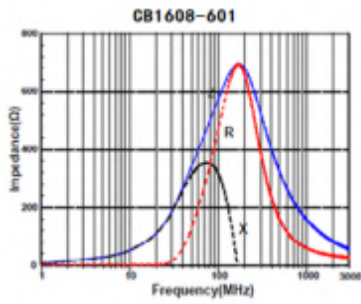




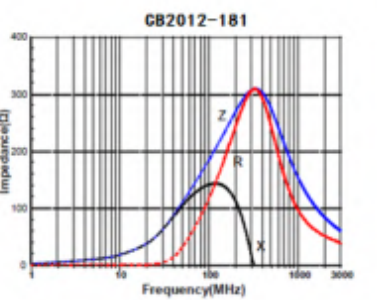
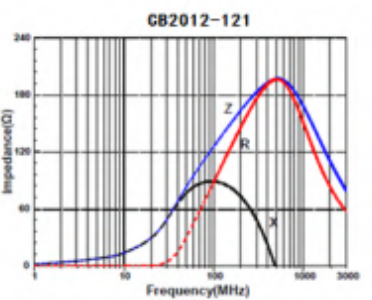
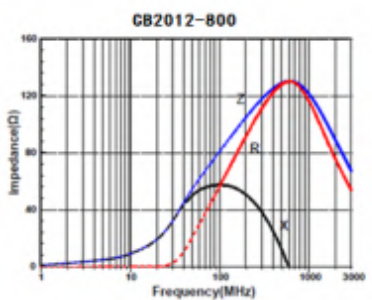
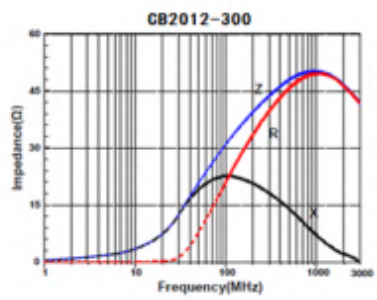
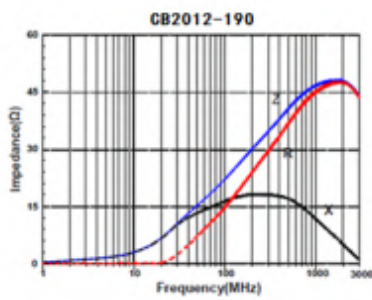
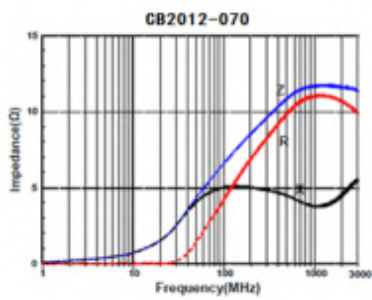


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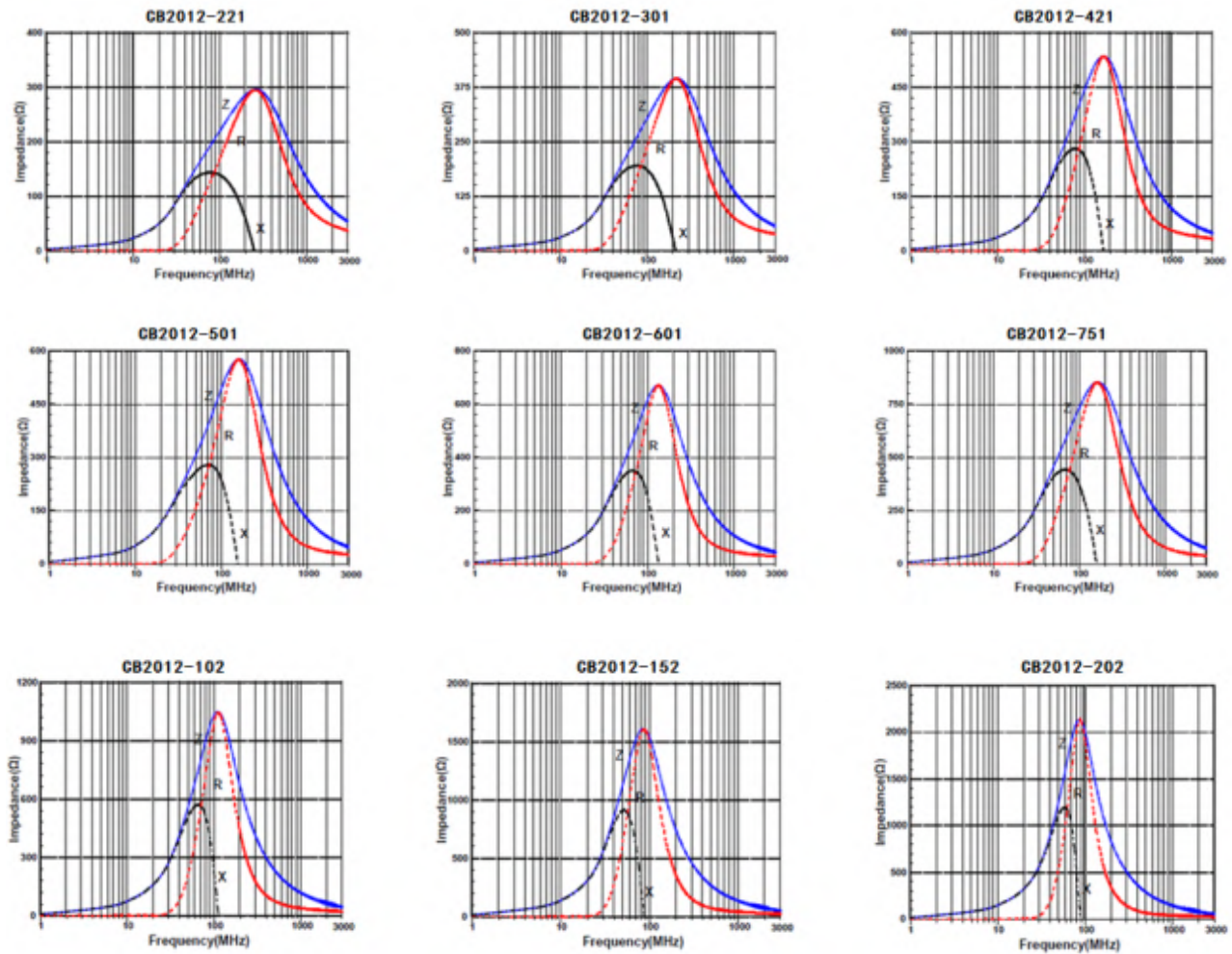




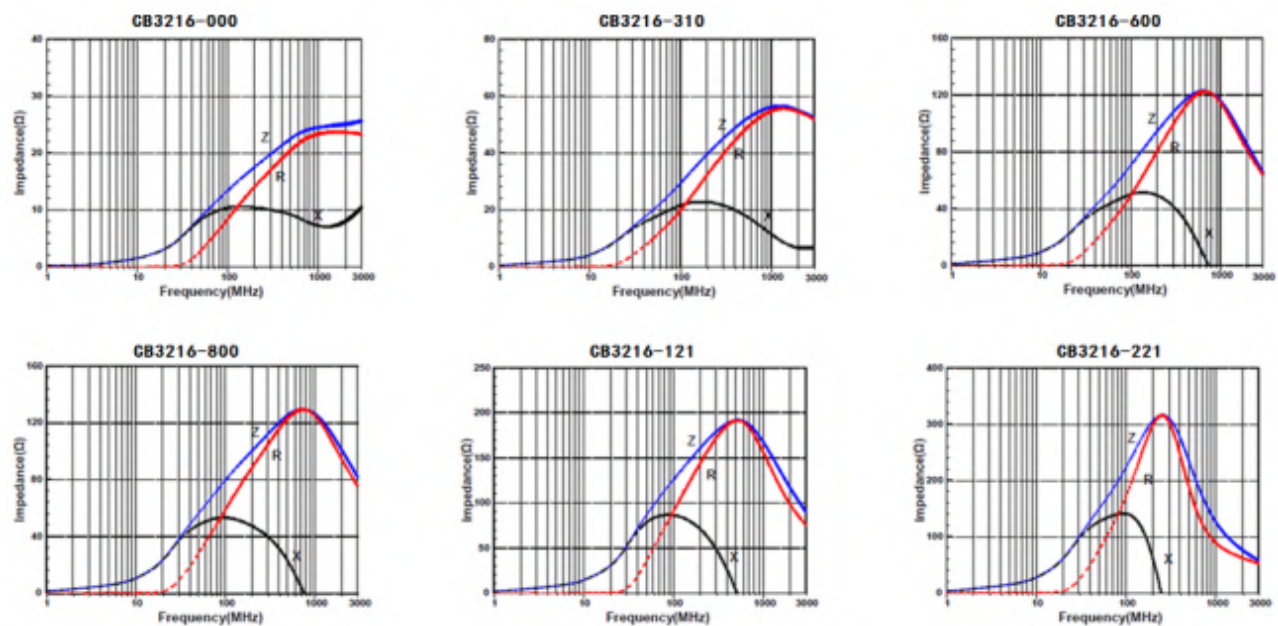
• ZCB2012

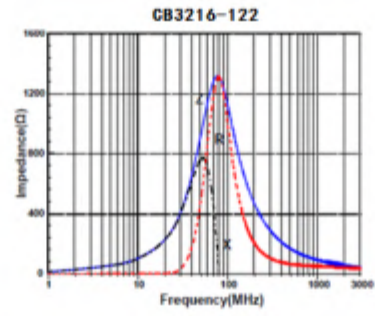
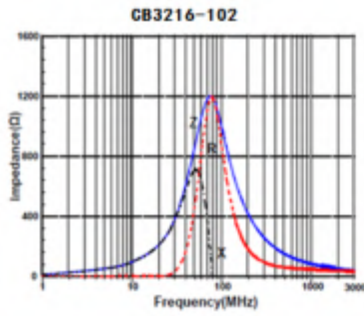
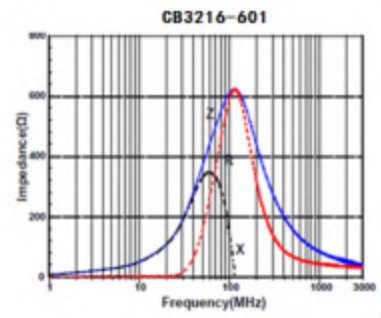
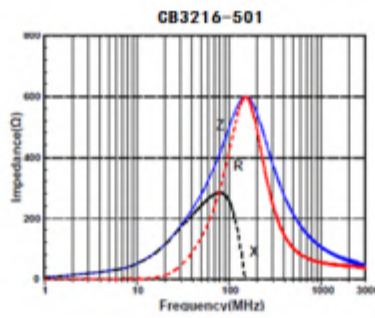
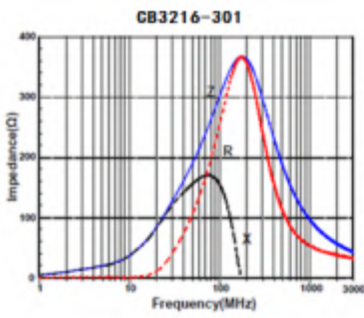






● ZCB3216



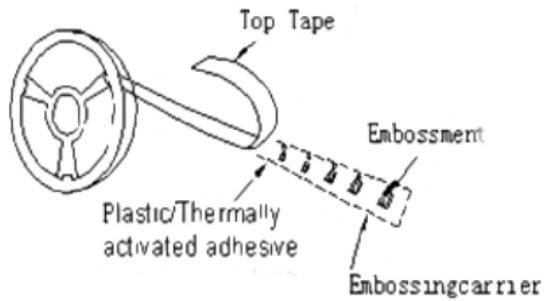




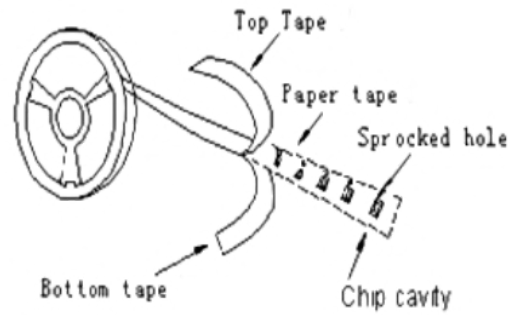
## PACKAGING STYLE

### • Taping Material

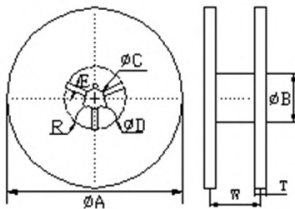
Embossing Tape



Paper Tape



### • Reel Dimensions(mm)



Tape Width	A	B	C	D	E	W	T	R
8mm	178±2	60±1	13±0.5	21±0.8	2±0.5	10±1	1.5±0.5	1
12mm	178±2	60±1	13±0.5	21±0.8	2±0.5	14±1	1.5±0.5	1

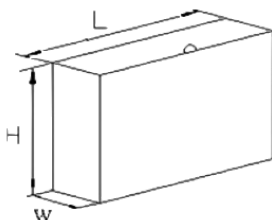
## STORAGE

### • Quantity

Type	PCS/REEL	PCS/INNERBOX	PCS/OUTERBOX
1005	10000	50000	250000
1608	4000	20000	100000
2012	4000	20000	100000
3216	4000	20000	100000
3225	2000	10000	50000

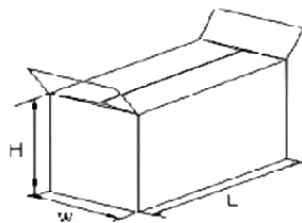
### • Packing Dimensions(mm)

Inner Box Dimensions



L	W	H	THICK
180±3	70±3	190±3	2±0.8

Outer Box Dimensions



L	W	H	THICK
370±3	200±3	210±3	2±0.8

### • Storage

Please be sure to the parts at 40°C, or less, 70%RH or less, and isolate the parts from sulphic and chloric atmosphere.