

High “R” beads

OPERATING TEMP.	1005	-55 ~ 125
	1608	-40 ~ +85
	2012	-40 ~ +85



FEATURES

- CBH series beads exhibit high resistance at low frequency, which makes it stop the reduction of the wave-form effectively.

APPLICATIONS

- Applied in portable computer and digital cameras.

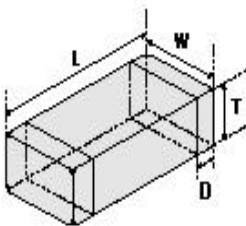
ORDERING CODE

CBH	201209	W	121	T
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Product Code		Dimensions (L × W × T) (mm)		Material Code	Impedance ()		Packaging Style	
CBH	HIGH “R” BEADS	100505	1.0 × 0.5 × 0.5	W	Example		T	Tape&Reel
		160808	1.6 × 0.8 × 0.8				B	Bulk
		201209	2.0 × 1.2 × 0.9		110	11		
		321609	3.2 × 1.6 × 0.9		121	120		
					221	220		

SHAPE AND DIMENSIONS

unit : mm(inch)



Part No.	L	W	T	D
100505 (0402)	1.0 ± 0.15 (0.040 ± 0.006)	0.5 ± 0.15 (0.020 ± 0.006)	0.5 ± 0.15 (0.020 ± 0.006)	0.25 ± 0.10 (0.010 ± 0.004)
160808 (0603)	1.6 ± 0.2 (0.063 ± 0.008)	0.8 ± 0.2 (0.031 ± 0.008)	0.8 ± 0.2 (0.031 ± 0.008)	0.3 ± 0.2 (0.01 ± 0.008)
201209 (0805)	2.0 ± 0.2 (0.079 ± 0.008)	1.2 ± 0.2 (0.047 ± 0.008)	0.9 ± 0.2 (0.035 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)
321609 (1206)	3.2 ± 0.2 (0.126 ± 0.008)	1.6 ± 0.2 (0.063 ± 0.008)	0.9 ± 0.2 (0.035 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)

ELECTRICAL CHARACTERISTICS

1005 TYPE

Part No.	Impedance () At 100MHz	DCR ()Max	Ir (mA)Max
CBH100505W310	31 ± 25%	0.20	300
CBH100505W600	60 ± 25%	0.35	200
CBH100505W800	80 ± 25%	0.40	200
CBH100505W121	120 ± 25%	0.50	150
CBH100505W181	180 ± 25%	0.60	150
CBH100505W301	300 ± 25%	0.80	100
CBH100505W501	500 ± 25%	1.1	100
CBH100505W601	600 ± 25%	1.3	100

1608 TYPE

Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBH160808W800	80 ± 25%	0.20	300
CBH160808W101	100 ± 25%	0.20	200
CBH160808W181	180 ± 25%	0.30	200
CBH160808W221	220 ± 25%	0.40	200
CBH160808W301	300 ± 25%	0.45	150
CBH160808W601	600 ± 25%	0.60	100
CBH160808W801	800 ± 25%	0.70	100
CBH160808W122	1200 ± 25%	0.90	100

2012 TYPE

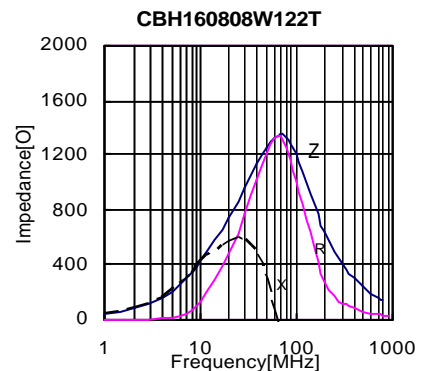
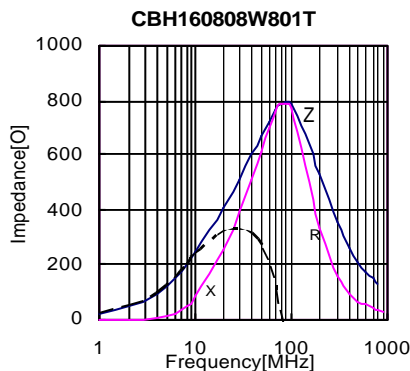
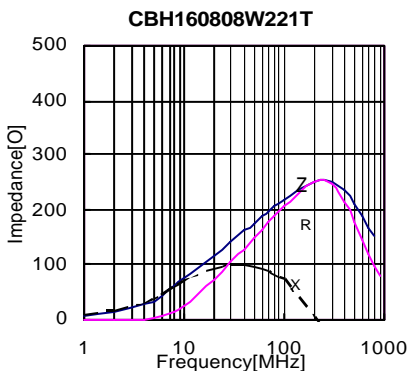
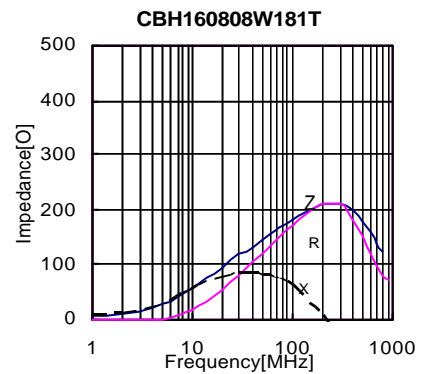
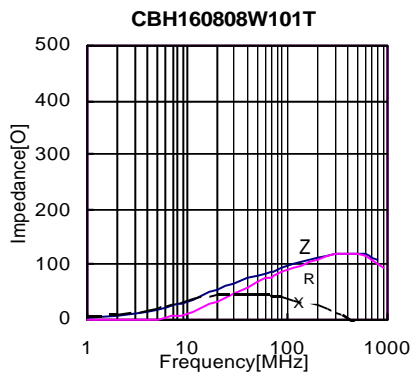
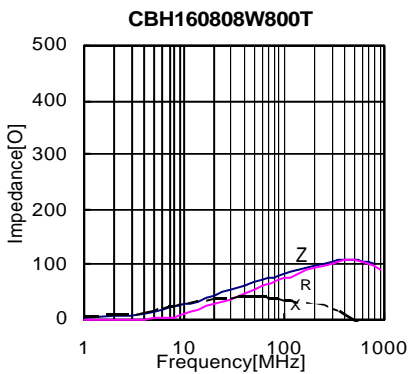
Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBH201209W800	80 ± 25%	0.25	400
CBH201209W121	120 ± 25%	0.25	300
CBH201209W151	150 ± 25%	0.25	300
CBH201209W221	220 ± 25%	0.30	300
CBH201209W301	300 ± 25%	0.35	300
CBH201209W501	500 ± 25%	0.40	200
CBH201209W601	600 ± 25%	0.45	200
CBH201209W801	800 ± 25%	0.50	150
CBH201209W102	1000 ± 25%	0.60	100

3216 TYPE

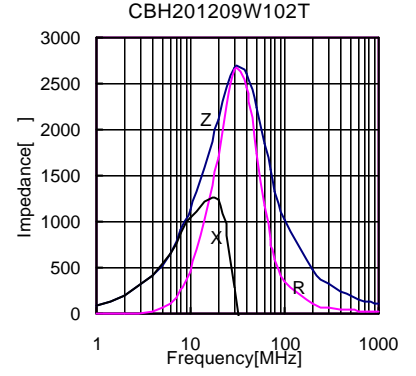
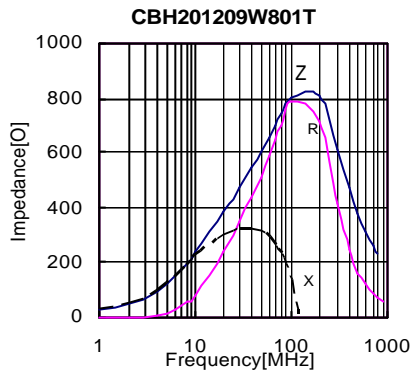
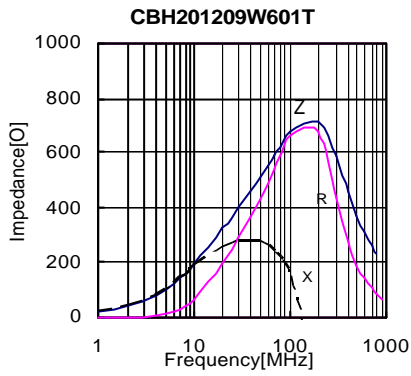
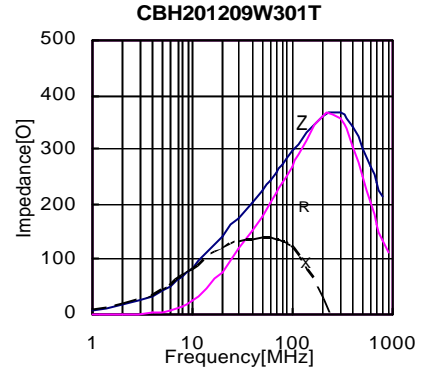
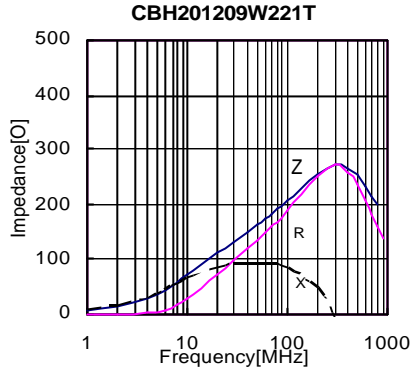
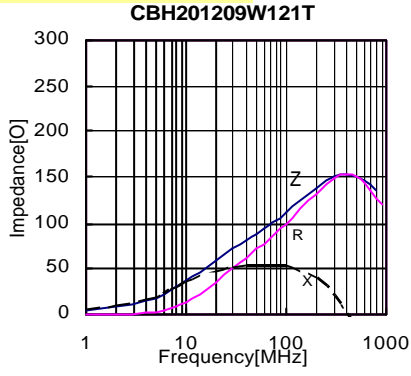
Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBH321609W260	26 ± 25%	0.10	500
CBH321609W121	120 ± 25%	0.20	300
CBH321609W301	300 ± 25%	0.25	300
CBH321609W501	500 ± 25%	0.30	200
CBH321609W601	600 ± 25%	0.35	200
CBH321609W801	800 ± 25%	0.50	200

CHARACTERISTICS CURVES

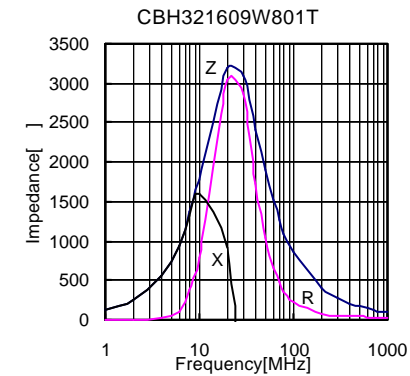
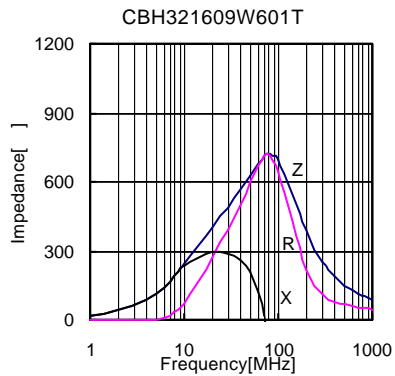
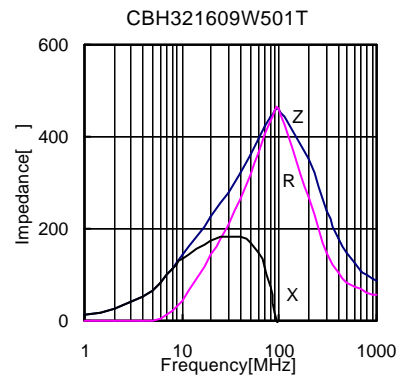
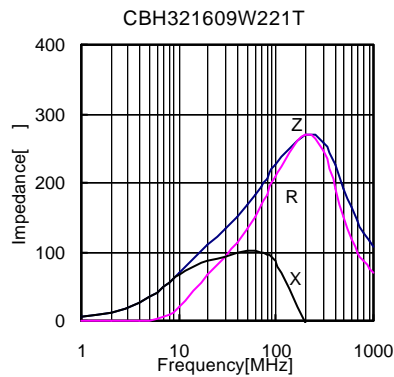
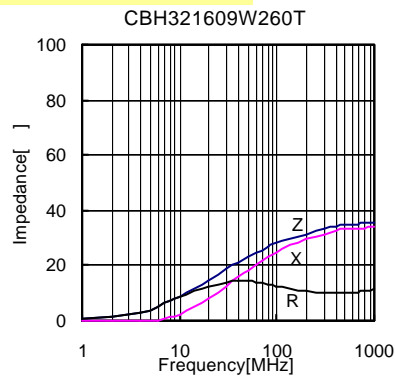
1608 series



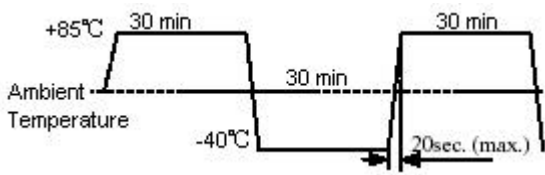
2012 series

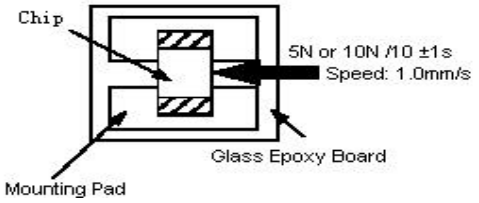
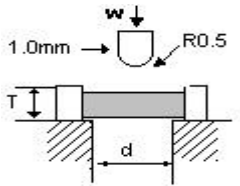


3216 series



RELIABILITY TESTING (VHF, CMI, CBG, CBW, CBH, CBY, CBA series)

Type	Item	Specified value	Test methods
1	Operating temperature range	-40 to +125	
2	Storage temperature range	-40 to +125	
3	Solderability	At least 90% of terminal electrode is covered by new solder	Solder temperature: 230 ± 5 Duration: 4 ± 1S Preheating temperature: 120 to 150 Preheating time: 60S Flux: immersion into methanol solution with colophony for 3 to 5 sec. Immersion speed: 25mm/sec
4	Resistance to soldering	Appearance: No significant abnormality. At least 75% of terminal electrode is covered by new solder Impedance change: within ± 20% Inductor change: within ± 10%	Solder temperature: 260 ± 5 Duration: 10 ± 0.5S Preheating temperature: 120 to 150 Preheating time: 60S Flux: immersion into methanol solution with colophony for 3 to 5 sec. Immersion speed: 25mm/sec
5	Thermal shock	Appearance: No significant abnormality. Impedance change: within ± 20% Inductor change: within ± 10%	Temperature: -40 for 30 ± 3min +85 for 30 ± 3min Transforming interval :max 20 sec Number of cycles: 32 
6	Loading at low temperature	Appearance: No significant abnormality. Impedance change: within ± 20% Inductor change: within ± 10%	Temperature: -55 ± 2 Duration: 500 hrs
7	Loading at high temperature	Appearance: No significant abnormality. Impedance change: within ± 20% Inductor change: within ± 10%	Temperature: 85 ± 2 Duration: 1000 $\begin{smallmatrix} +24 \\ -0 \end{smallmatrix}$ hrs Applied current: Rated current
8	Loading under Damp Heat	Appearance: No significant abnormality. Impedance change: within ± 20% Inductor change : within ± 10%	Temperature: 55 ± 2 Duration: 500 $\begin{smallmatrix} +24 \\ -0 \end{smallmatrix}$ hrs Humidity: 90 to 95%RH Applied current: Rated current

Type	Item	Specified value	Test methods								
9	Vibration	Appearance: No significant abnormality. Impedance change: within $\pm 20\%$. Inductor change : within $\pm 10\%$	Amplitude: 1.5mm Directions: 2hrs each in X Y Z direction Frequency range: 10 to 55 to 10Hz (min)								
10	Adhesion of electrode	Impedance change: within $\pm 20\%$ Inductor change : within $\pm 10\%$ Appearance: No significant abnormality.	Applied force: 5N force for 1005 and 1608 series. 10N force for 2012、3216、3225、4516、4532series. Keep time : $10 \pm 1S$ 								
11	Resistance to pressure of substrate	The body shall not be damaged by forces applied on the right. <table border="1" data-bbox="395 1003 805 1081"> <tr> <td>d</td> <td>1.3</td> <td>1.3</td> <td>2.0</td> </tr> <tr> <td>w</td> <td>2.0</td> <td>3.0</td> <td>4.0</td> </tr> </table>	d	1.3	1.3	2.0	w	2.0	3.0	4.0	
d	1.3	1.3	2.0								
w	2.0	3.0	4.0								

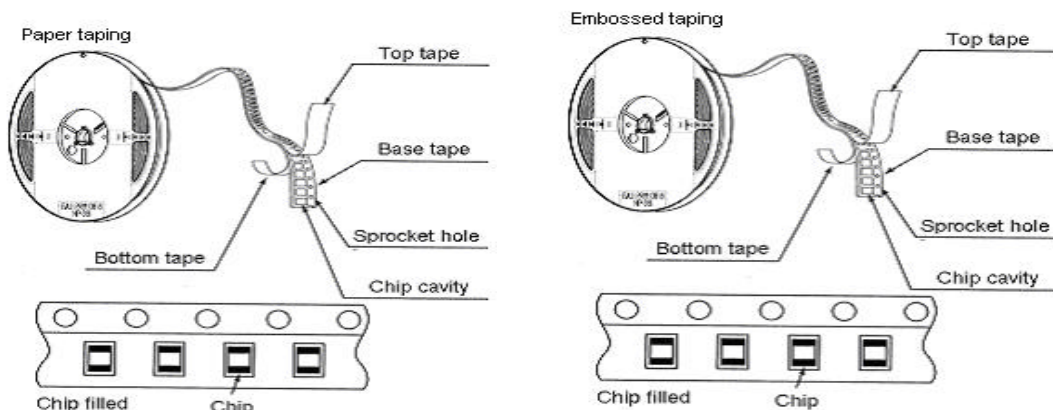
Note: When there are questions concerning, measurement shall be made after 24 ± 2 hrs of recovery under the standard condition.

包装 PACKAGING

STANDAE QUANTITY

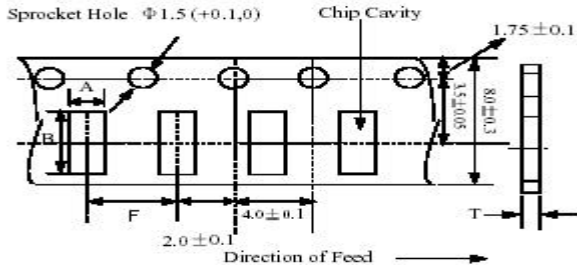
TYPE	100505	160808	201209	321609	321611	322513	451616	453215
Quantity(pcs)	10000	4000	4000	4000	3000	3000	5000	3000

TAPING DRAWINGS



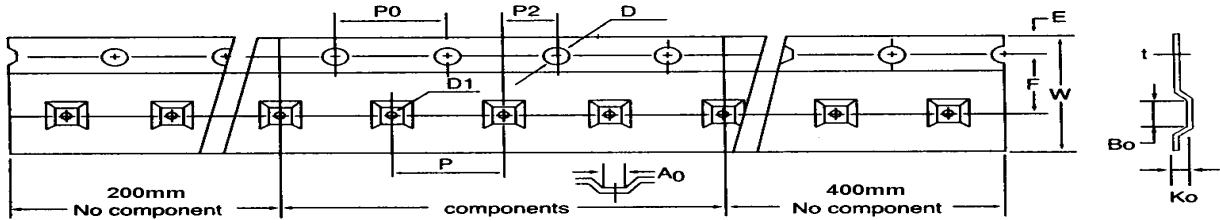
TAPING DIMENSIONS (UNIT: mm)

Paper tape



Part NO.	A	B	F	T
100505	0.65 ± 0.1	1.15 ± 0.1	2.0 ± 0.05	0.8max
160808	1.0 ± 0.2	1.8 ± 0.2	4.0 ± 0.2	1.1max
201209	1.5 ± 0.2	2.3 ± 0.2	4.0 ± 0.2	1.1max

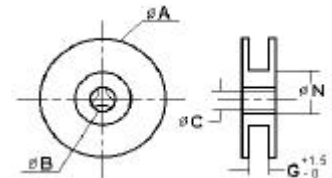
Embossed tape



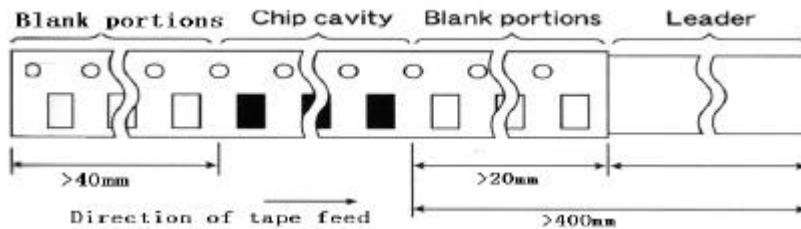
	4532	4516	3225	3216	2012
W	12.0 ± 0.2	12.0 ± 0.2	8.1 ± 0.2	8.1 ± 0.2	8.1 ± 0.2
P	8.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10
E	1.75 ± 0.10	1.75 ± 0.10	1.75 ± 0.10	1.75 ± 0.10	1.75 ± 0.10
F	5.50 ± 0.10	5.50 ± 0.10	3.50 ± 0.10	3.50 ± 0.10	3.50 ± 0.10
D	1.55 ± 0.05	1.55 ± 0.05	1.55 ± 0.05	1.55 ± 0.05	1.55 ± 0.05
D1	$1.50^{+0.25}_0$	$1.50^{+0.25}_0$	$1.50^{+0.25}_0$	$1.50^{+0.25}_0$	$1.50^{+0.25}_0$
P_0	4.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10	4.0 ± 0.10
P_{010}	40.0 ± 0.20	40.0 ± 0.20	40.0 ± 0.20	40.0 ± 0.20	40.0 ± 0.20
P_2	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05
A_0	3.66 ± 0.10	1.93 ± 0.10	2.80 ± 0.10	1.90 ± 0.10	1.52 ± 0.10
B_0	4.95 ± 0.10	4.95 ± 0.10	3.50 ± 0.10	3.51 ± 0.10	2.41 ± 0.10
t	0.23 ± 0.10	0.23 ± 0.10	0.23 ± 0.10	0.23 ± 0.10	0.23 ± 0.10

REEL DIMENSIONS (UNIT : mm)

	A	B	C	N	G
CF-8	178 ± 2.0	22.0 ± 2.0	12.5 ± 1.5	67 ± 2.0	8
CF-12	330 ± 2.0	22.0 ± 2.0	12.5 ± 1.5	110 ± 2.0	12



LEADER AND BLANK PORTION



PEELING OFF FORCE : 0.05 to 0.7N in the direction show below.

