

Sharp type beads

OPERATING TEMP.	1005 : -55 ~ 125
	1608
	以上规格 :-40 ~ +85



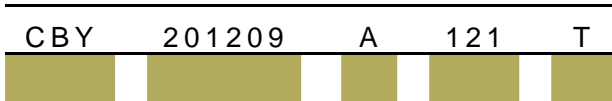
FEATURES

- Excellent solderability and high heat resistance for either reflow or wave soldering.
- No lead, ideal for SMT.
- Monolithic inorganic material construction for high reliability.

APPLICATIONS

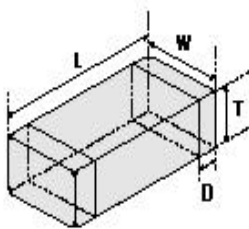
- Computers and peripherals、 Communication equipments、 digital TV sets, VTRS.

ORDERING CODE



Product Code		Dimensions (L x W x T) (mm)		Material Code	Impedance ()		Packaging Style	
CBY	Sharp Type Beads	100505	1.0 x 0.5 x 0.5	A	Example		T	Tape&Reel
		160808	1.6 x 0.8 x 0.8				B	Bulk
		201209	2.0 x 1.2 x 0.9		110	11		
		321609	3.2 x 1.6 x 0.9		121	120		
					221	220		

SHAPE AND DIMENSIONS



Part No.	Unit:mm/inch			
	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
CBY100505A070	5~11	0.045	500
CBY100505A190	19 ± 25%	0.05	300
CBY100505A310	31 ± 25%	0.20	300
CBY100505A600	60 ± 25%	0.35	200
CBY100505A800	80 ± 25%	0.40	200
CBY100505A121	120 ± 25%	0.50	150
CBY100505A151	150 ± 25%	0.55	150
CBY100505A181	180 ± 25%	0.60	150
CBY100505A221	220 ± 25%	0.70	150
CBY100505A301	300 ± 25%	0.80	100

Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBY100505A501	500 ± 25%	1.10	100
CBY100505A601	600 ± 25%	1.30	100
CBY100505A801	800 ± 25%	1.40	50

1608 TYPE

Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBY160808A070	5~10	0.10	500
CBY160808A110	11~20	0.20	500
CBY160808A260	26 ± 25%	0.20	500
CBY160808A310	31 ± 25%	0.25	400
CBY160808A500	50 ± 25%	0.25	300
CBY160808A700	70 ± 25%	0.30	300
CBY160808A800	80 ± 25%	0.30	300
CBY160808A101	100 ± 25%	0.30	300
CBY160808A121	120 ± 25%	0.35	200
CBY160808A151	150 ± 25%	0.35	200
CBY160808A181	180 ± 25%	0.40	200
CBY160808A221	220 ± 25%	0.40	200
CBY160808A301	300 ± 25%	0.50	150
CBY160808A501	500 ± 25%	0.60	150
CBY160808A601	600 ± 25%	0.70	100
CBY160808A801	800 ± 25%	0.80	100
CBY160808A102	1000 ± 25%	0.90	100
CBY160808A122	1200 ± 25%	0.95	100

2012 TYPE

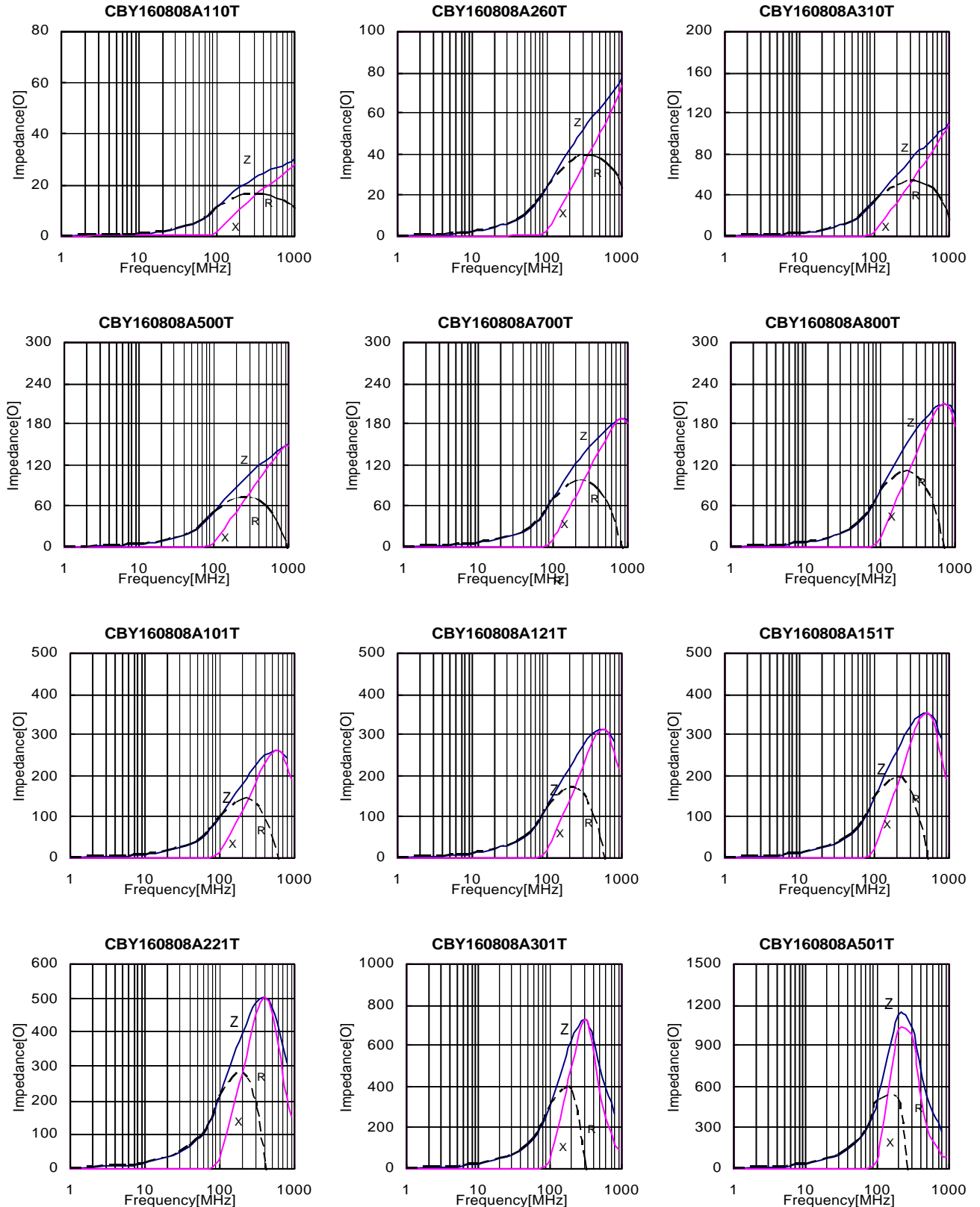
Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBY201209A110	7~11	0.10	600
CBY201209A190	19 ± 25%	0.10	600
CBY201209A260	26 ± 25%	0.15	400
CBY201209A310	31 ± 25%	0.15	400
CBY201209A500	50 ± 25%	0.20	400
CBY201209A600	60 ± 25%	0.20	400
CBY201209A800	80 ± 25%	0.25	400
CBY201209A121	120 ± 25%	0.25	300
CBY201209A151	150 ± 25%	0.25	300
CBY201209A181	180 ± 25%	0.25	300
CBY201209A221	220 ± 25%	0.30	300
CBY201209A301	300 ± 25%	0.30	200
CBY201209A501	500 ± 25%	0.35	200
CBY201209A601	600 ± 25%	0.40	200
CBY201209A801	800 ± 25%	0.45	150
CBY201209A102	1000 ± 25%	0.50	100
CBY201209A122	1200 ± 25%	0.60	100
CBY201209A152	1500 ± 25%	0.70	50
CBY201209A182	1800 ± 25%	0.80	50
CBY201209A202	2000 ± 25%	0.80	50
CBY201209A252	2500 ± 25%	0.90	50
CBY201209A302	3000 ± 25%	0.95	50

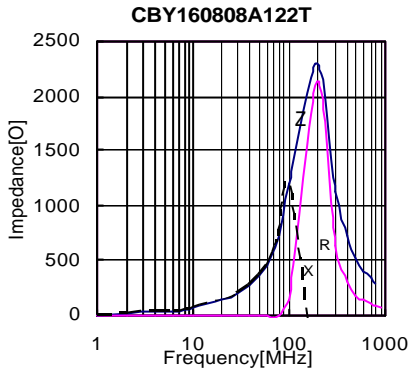
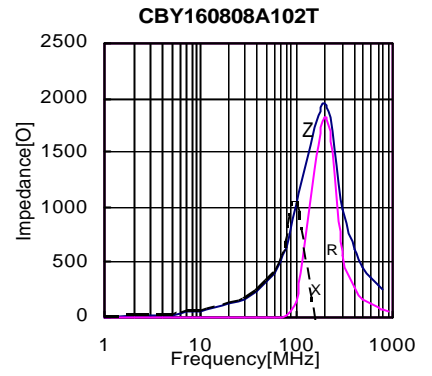
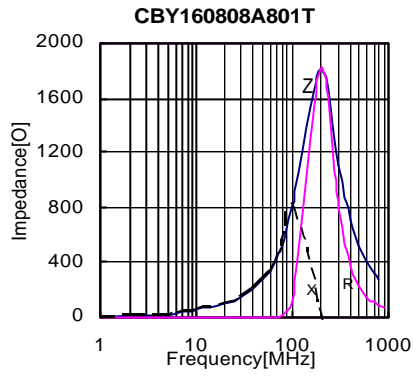
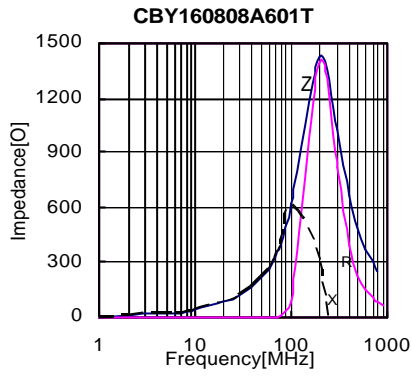
3216 TYPE

Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBY321609A190	19 ± 25%	0.10	500
CBY321609A260	26 ± 25%	0.10	500
CBY321609A310	31 ± 25%	0.10	500
CBY321609A700	70 ± 25%	0.20	400
CBY321609A800	80 ± 25%	0.20	300
CBY321609A101	100 ± 25%	0.25	300
CBY321609A121	120 ± 25%	0.30	300
CBY321609A151	150 ± 25%	0.30	300
CBY321609A221	220 ± 25%	0.30	300
CBY321609A301	300 ± 25%	0.35	300
CBY321609A501	500 ± 25%	0.35	200

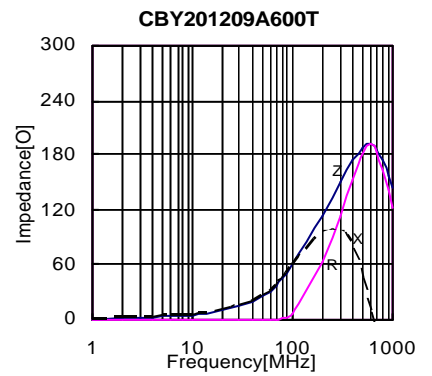
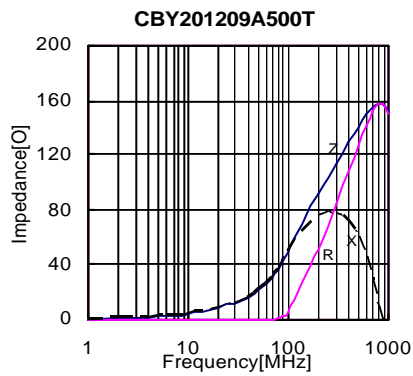
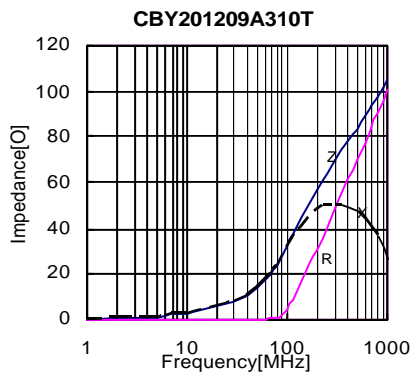
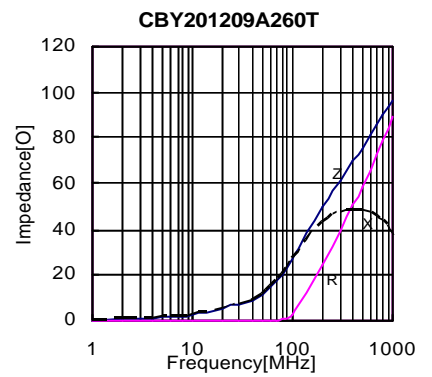
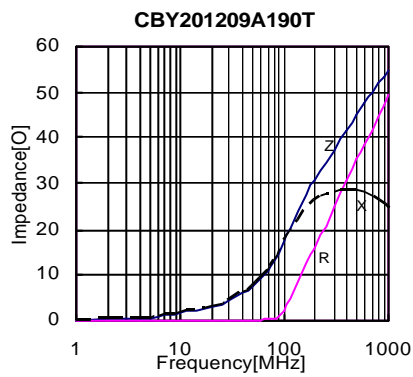
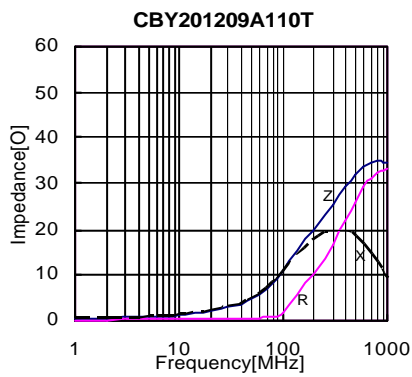
Part No.	Impedance() At 100MHz	DCR ()Max	Ir (mA)Max
CBY321609A601	600 ± 25%	0.35	200
CBY321609A801	800 ± 25%	0.40	200
CBY321609A102	1000 ± 25%	0.50	200
CBY321609A122	1200 ± 25%	0.60	100
CBY321609A202	2000 ± 25%	0.70	100

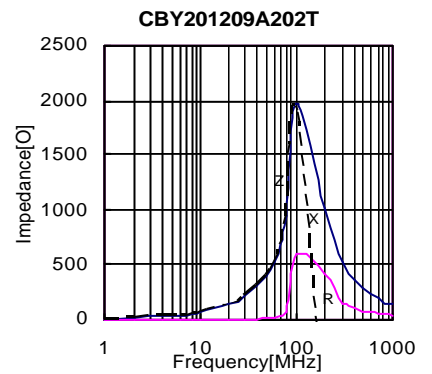
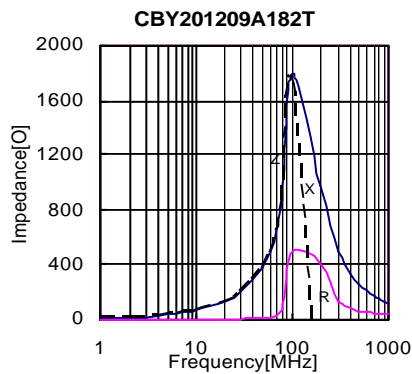
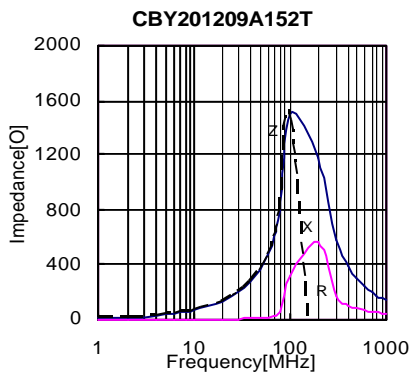
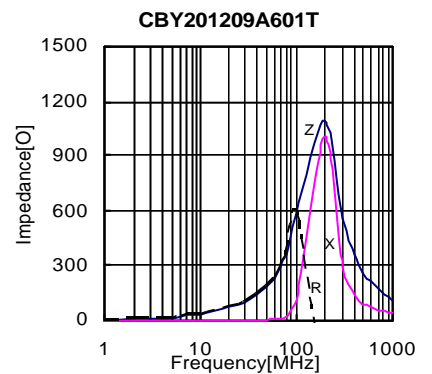
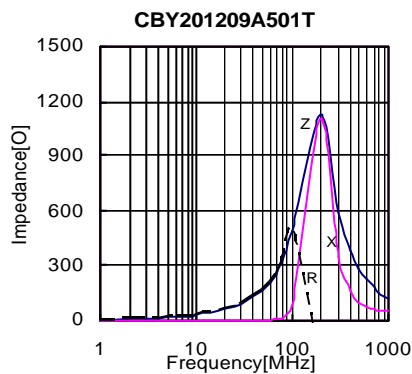
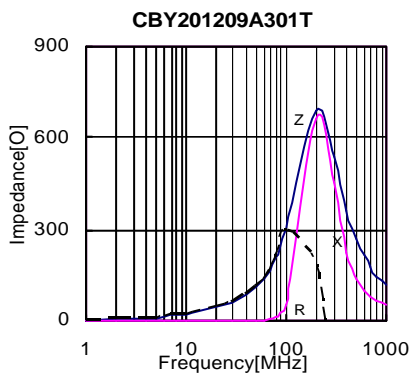
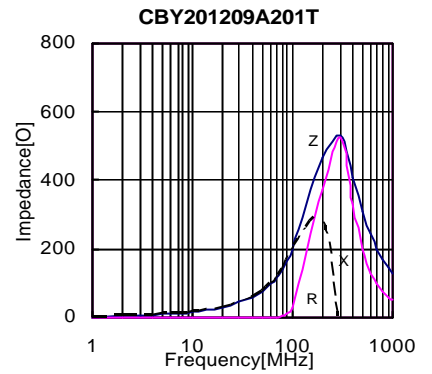
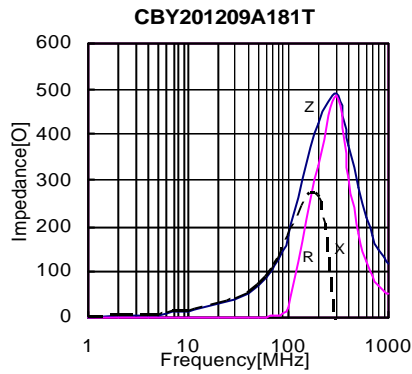
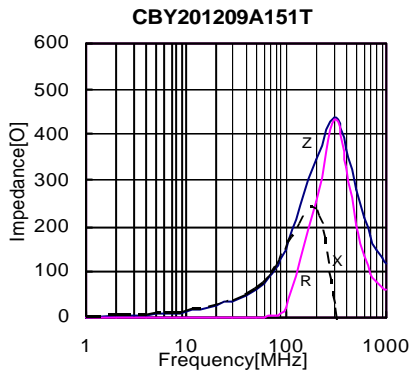
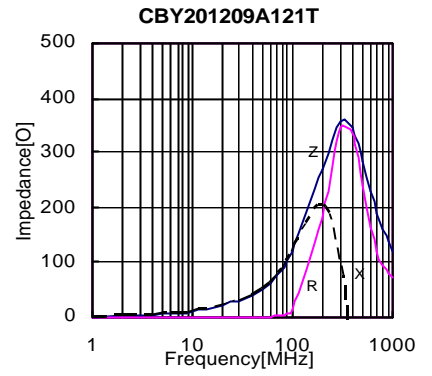
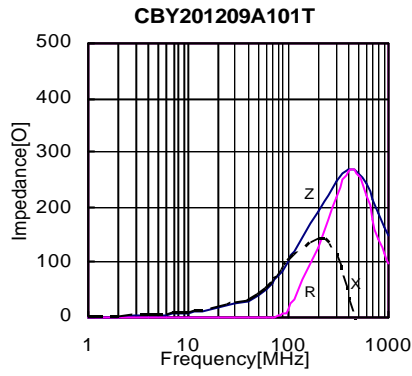
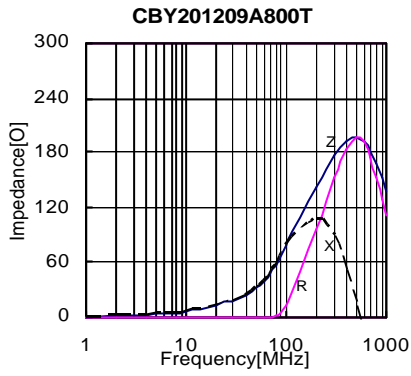
1608 series

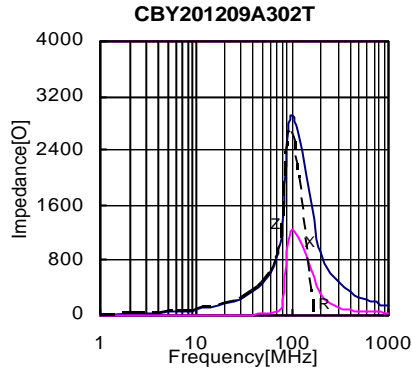
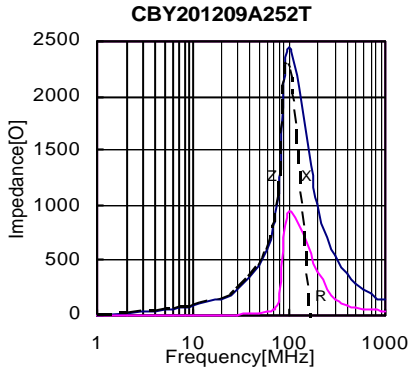




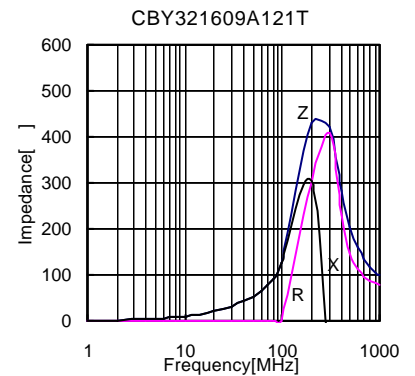
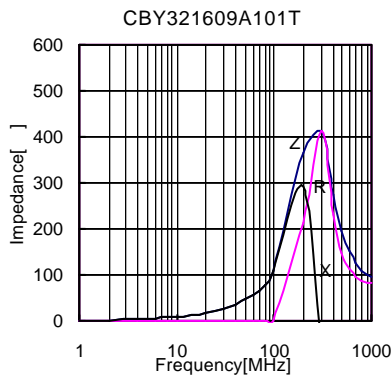
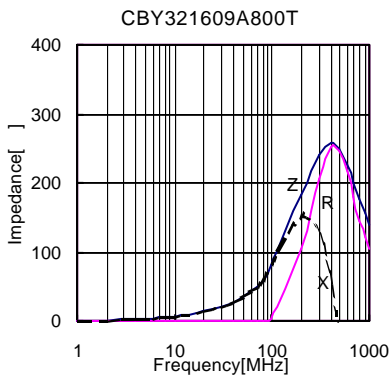
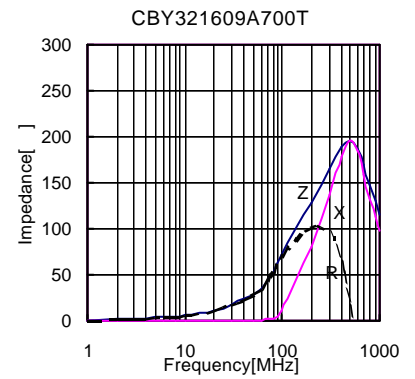
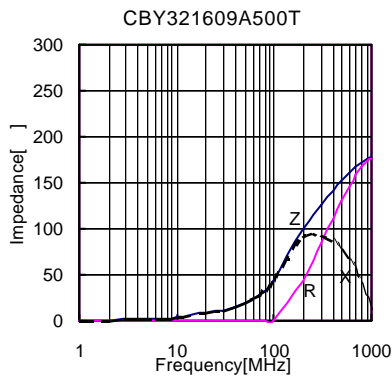
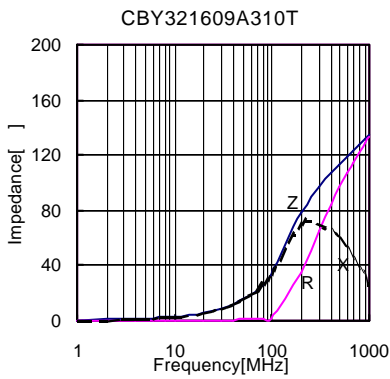
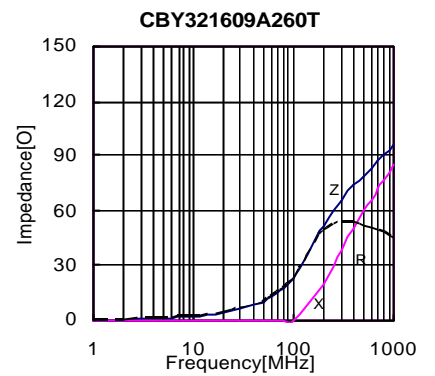
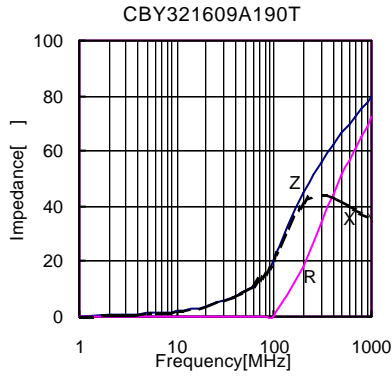
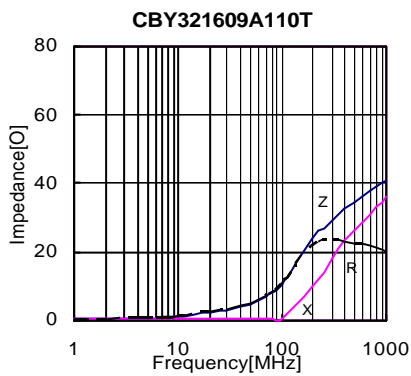
2012 series

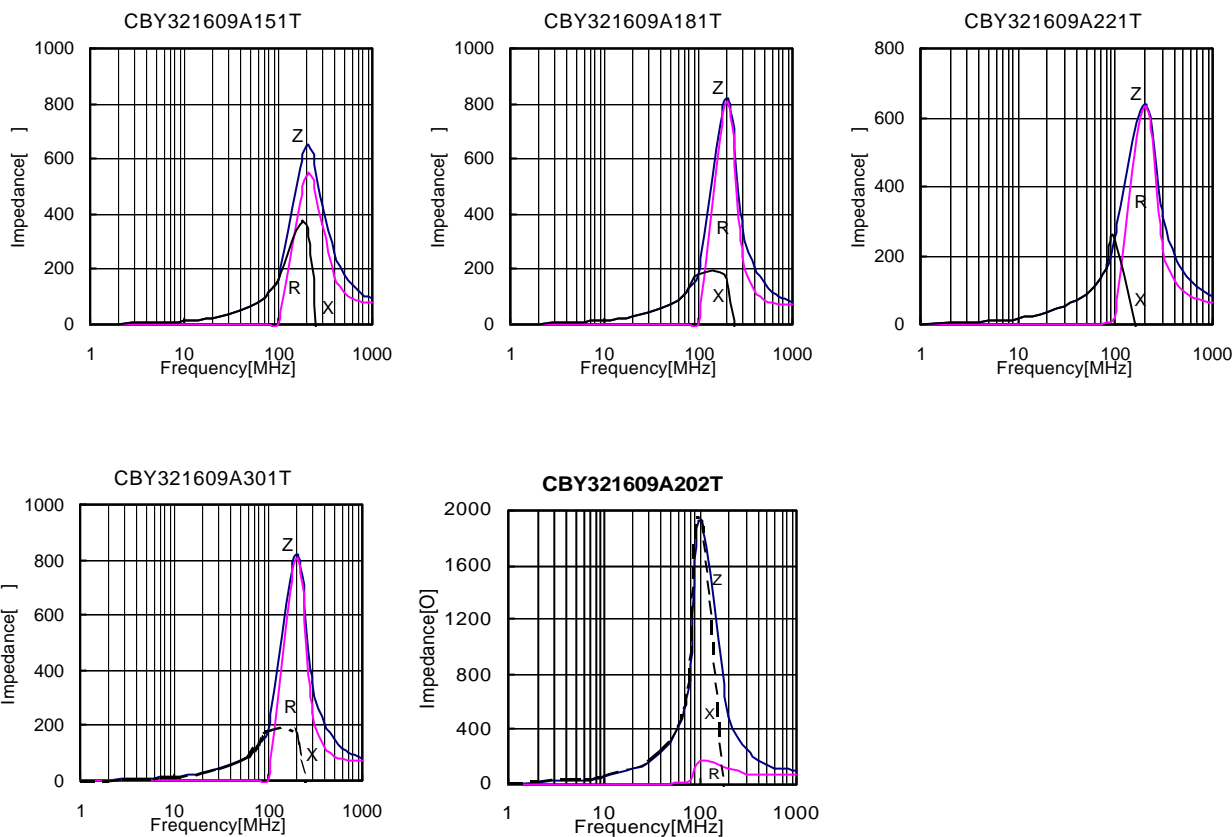






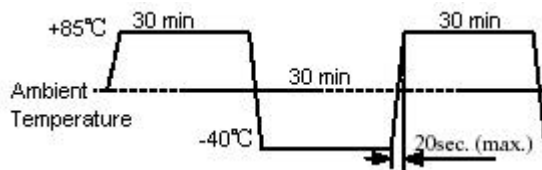
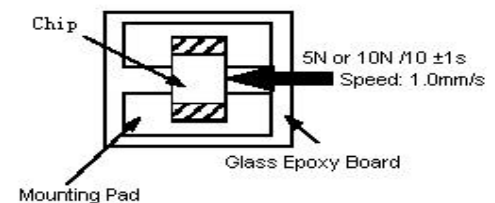
3216 series





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 ± 1 S Preheating temperature: 120 to 150 Preheating time: 60S Flux: immersion into methanol solution with colophony for 3 to 5 sec. Immersion speed: 25mm/sec

Type	Item	Specified value	Test methods
4	Resistance to soldering	Appearance: No significant abnormality. At least 75% of terminal electrode is covered by new solder Impedance change: within $\pm 20\%$ Inductor change: within $\pm 10\%$	Solder temperature: 260 ± 5 Duration: $10 \pm 0.5S$ 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 $\pm 20\%$ Inductor change: within $\pm 10\%$	Temperature: -40 for $30 \pm 3min$ +85 for $30 \pm 3min$ Transforming interval :max 20 sec Number of cycles: 32 
6	Loading at low temperature	Appearance: No significant abnormality. Impedance change: within $\pm 20\%$ Inductor change: within $\pm 10\%$	Temperature: -55 ± 2 Duration: 500 hrs
7	Loading at high temperature	Appearance: No significant abnormality. Impedance change: within $\pm 20\%$ Inductor change: within $\pm 10\%$	Temperature: 85 ± 2 Duration: 1000^{+24}_0 hrs Applied current: Rated current
8	Loading under Damp Heat	Appearance: No significant abnormality. Impedance change: within $\pm 20\%$ Inductor change : within $\pm 10\%$	Temperature: 55 ± 2 Duration: 500^{+24}_0 hrs Humidity: 90 to 95%RH Applied current: Rated current
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 : $10 \pm 1S$ 

Type	Item	Specified value	Test methods			
11	Resistance to pressure of substrate	The body shall not be damaged by forces applied on the right.				
		d		1.3	1.3	2.0
		w		2.0	3.0	4.0

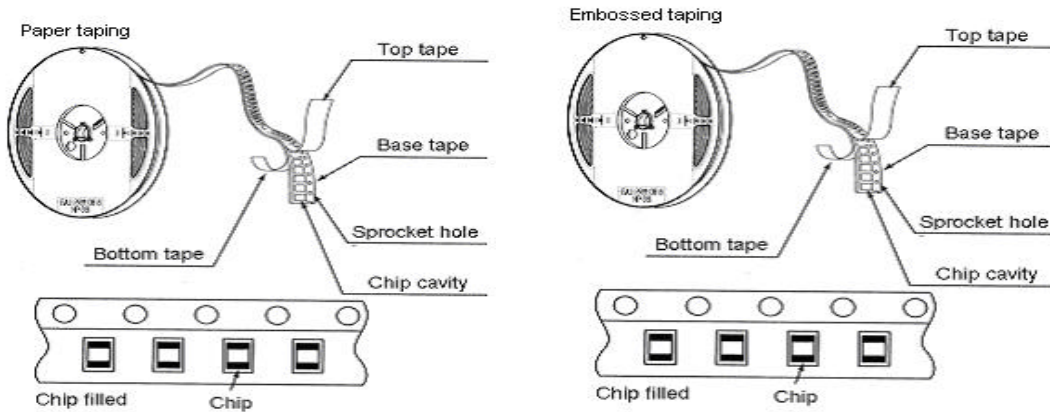
Note: When there are questions concerning, measurement shall be made after 24 ± 2hrs of recovery under the standard condition.

包装 PACKAGING

STANDAE QUANTITY

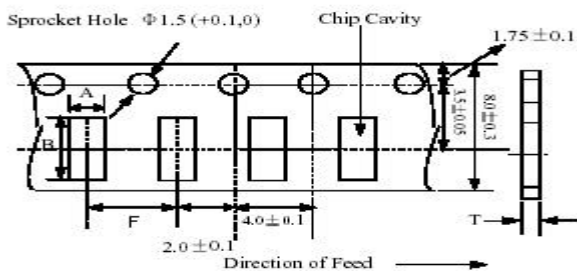
TYPE	100505	160808	201209	321609	321611	322513	451616	453215
Quantity(pcs)	10000	4000	4000	4000	3000	3000	5000	3000

TAPING DRAWINGS



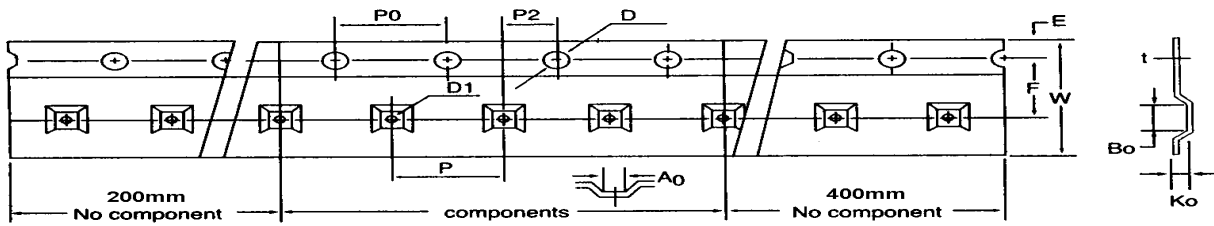
TAPING DIMENSIONS (UNIT: mm)

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

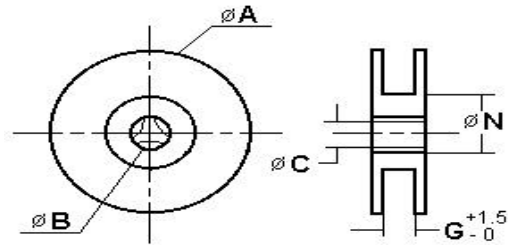
Embossed tape



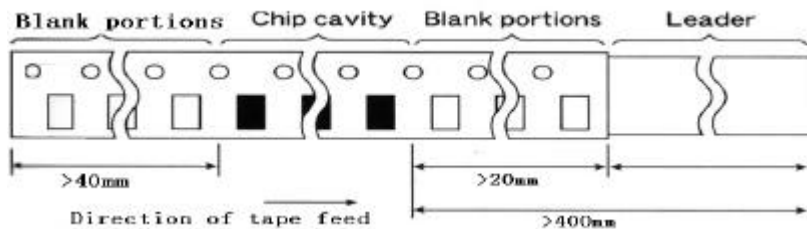
	4532	4516	3225	3216	2012
W	12.0+/-0.2	12.0+/-0.2	8.1+/-0.2	8.1+/-0.2	8.1+/-0.2
P	8.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	5.50+/-0.10	5.50+/-0.10	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10
D	1.55+/-0.05	1.55+/-0.05	1.55+/-0.05	1.55+/-0.05	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 ₀ 10	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.

