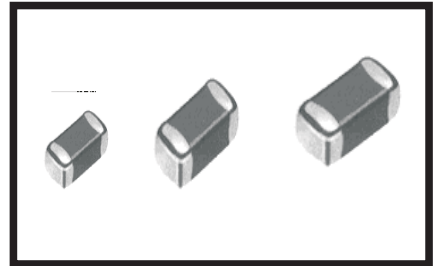


# 鐵氧體疊層片式磁珠 (尖峰型) FERRITE CHIP BEADS

## 鐵氧體疊層片式磁珠 (尖峰型) FERRITE CHIP BEADS

OPERATING TEMP.	-40~+85°C
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### ● 特征 FEATURES

- 良好的可焊性，適合于回流焊和波峰焊。
- 無引綫結構，適合于自動貼片安裝。
- 無機材料，獨石結構，具有高度可靠性。
- Excellent solderability and high heat resistance for either reflow or wave soldering.
- No lead, ideal for SMT.
- Monolithic inorganic material construction for high reliability.

### ● 應用 APPLICATIONS

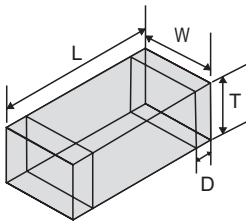
- 計算機及其外圍總綫、通訊設備、數字視聽產品和攝錄一體機。
- Computers and peripherals, Communication equipments, digital TV sets, VTRS.

### ● 產品規格型號的表示方法 ORDERING CODE

$\frac{\text{CBY}}{\text{①}}$      $\frac{201209}{\text{②}}$      $\frac{\text{A}}{\text{③}}$      $\frac{121}{\text{④}}$      $\frac{\text{T}}{\text{⑤}}$

①	②	③	④	⑤																																		
<table border="1"> <tr><th colspan="2">產品代號 Product Code</th></tr> <tr><td>CBY</td><td>尖峰型磁珠 Sharp Type Beads</td></tr> </table>	產品代號 Product Code		CBY	尖峰型磁珠 Sharp Type Beads	<table border="1"> <tr><th colspan="2">規格尺寸(L×W×T) (mm) Dimensions</th></tr> <tr><td>100505</td><td>1.0×0.5×0.5</td></tr> <tr><td>160808</td><td>1.6×0.8×0.8</td></tr> <tr><td>201209</td><td>2.0×1.2×0.9</td></tr> <tr><td>321609</td><td>3.2×1.6×0.9</td></tr> </table>	規格尺寸(L×W×T) (mm) Dimensions		100505	1.0×0.5×0.5	160808	1.6×0.8×0.8	201209	2.0×1.2×0.9	321609	3.2×1.6×0.9	<table border="1"> <tr><th colspan="2">材料代號 Material Code</th></tr> <tr><td colspan="2">A</td></tr> </table>	材料代號 Material Code		A		<table border="1"> <tr><th colspan="2">阻抗(Ω) Impedance</th></tr> <tr><td>實例 Example</td><td></td></tr> <tr><td>110</td><td>11</td></tr> <tr><td>121</td><td>120</td></tr> <tr><td>221</td><td>220</td></tr> </table>	阻抗(Ω) Impedance		實例 Example		110	11	121	120	221	220	<table border="1"> <tr><th colspan="2">包裝方式 Packaging Style</th></tr> <tr><td>T</td><td>卷帶盤裝 Tape &amp; Reel</td></tr> <tr><td>B</td><td>散裝 Bulk</td></tr> </table>	包裝方式 Packaging Style		T	卷帶盤裝 Tape & Reel	B	散裝 Bulk
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### ● 外形尺寸 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 (0.031±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)

• 電性能參數 ELECTRICAL CHARACTERISTICS

1005 TYPE

Part No.	Impedance( $\Omega$ ) At 100MHz	DCR ( $\Omega$ )Max	I <sub>r</sub> (mA)Max
CBY100505U070	0~11	0.10	300
CBY100505U190	12~25	0.10	300
CBY100505U260	26 ± 25%	0.20	300
CBY100505U310	31 ± 25%	0.20	300
CBY100505U600	60 ± 25%	0.35	200
CBY100505U101	100 ± 25%	0.50	150
CBY100505U121	120 ± 25%	0.50	150
CBY100505U151	150 ± 25%	0.55	150
CBY100505U221	220 ± 25%	0.70	150
CBY100505U301	300 ± 25%	0.80	100
CBY100505U501	500 ± 25%	1.10	100
CBY100505U601	600 ± 25%	1.30	100
CBY100505U801	800 ± 25%	1.40	50

1608 TYPE

Part No.	Impedance( $\Omega$ ) At 100MHz	DCR ( $\Omega$ )Max	I <sub>r</sub> (mA)Max
CBY160808A070	0~11	0.10	600
CBY160808A110	7~15	0.20	500
CBY160808A260	26±25%	0.25	400
CBY160808A310	31±25%	0.25	400
CBY160808A500	50±25%	0.30	300
CBY160808A700	70±25%	0.30	300
CBY160808A800	80±25%	0.30	300
CBY160808A101	100±25%	0.35	200
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%	1.00	100

鐵氧體疊層片式磁珠 (尖峰型)  
FERRITE CHIP BEADS

2012 TYPE

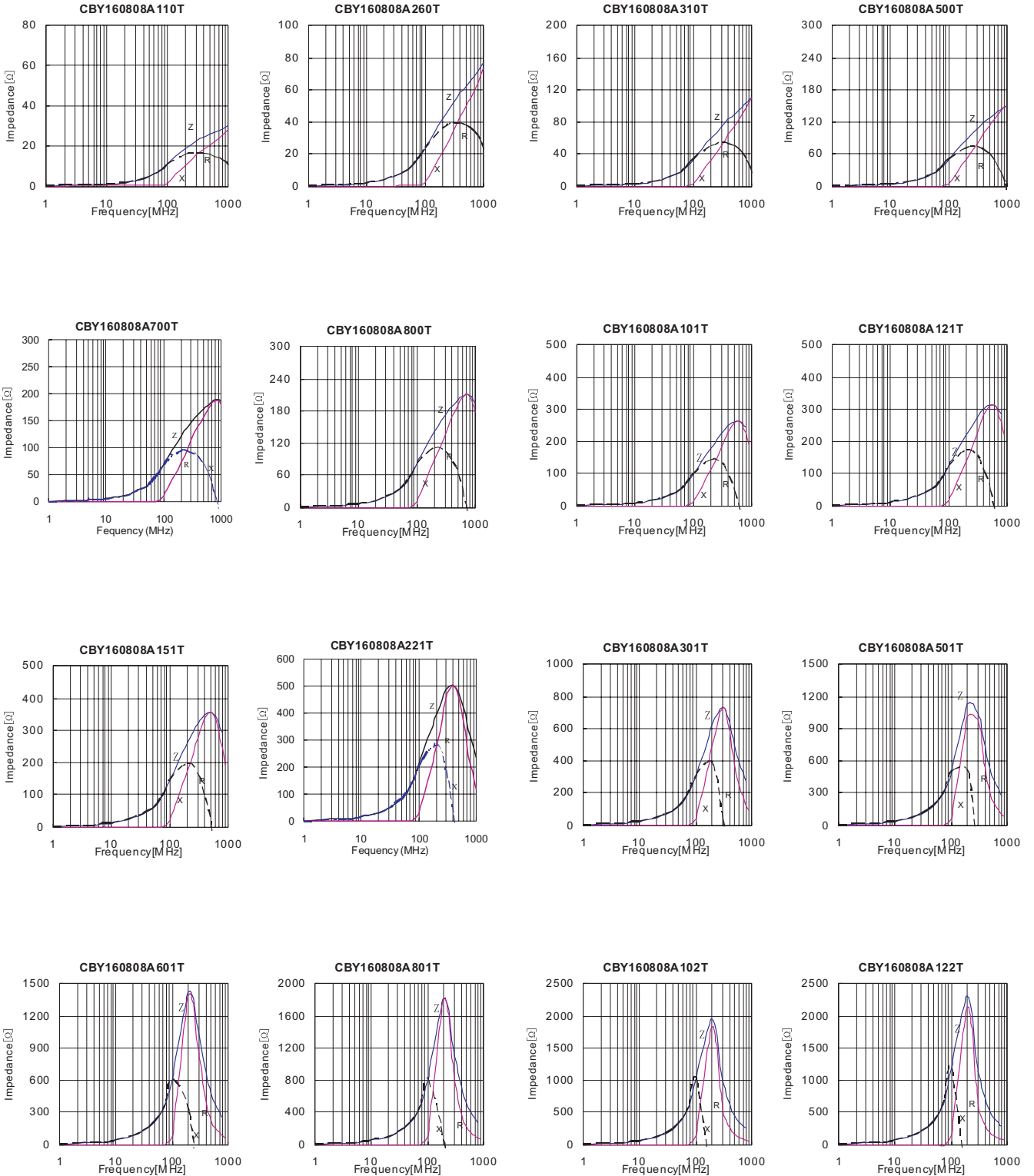
Part No.	Impedance( $\Omega$ ) At 100MHz	DCR ( $\Omega$ )Max	Ir (mA)Max
CBY201209A110	7~15	0.15	600
CBY201209A190	12~25	0.15	600
CBY201209A260	26 $\pm$ 25%	0.20	400
CBY201209A310	31 $\pm$ 25%	0.20	400
CBY201209A500	50 $\pm$ 25%	0.25	400
CBY201209A600	60 $\pm$ 25%	0.25	400
CBY201209A800	80 $\pm$ 25%	0.25	400
CBY201209A121	120 $\pm$ 25%	0.25	300
CBY201209A151	150 $\pm$ 25%	0.25	300
CBY201209A181	180 $\pm$ 25%	0.30	300
CBY201209A221	220 $\pm$ 25%	0.30	300
CBY201209A301	300 $\pm$ 25%	0.30	200
CBY201209A501	500 $\pm$ 25%	0.35	200
CBY201209A601	600 $\pm$ 25%	0.40	200
CBY201209A801	800 $\pm$ 25%	0.45	150
CBY201209A102	1000 $\pm$ 25%	0.50	100
CBY201209A122	1200 $\pm$ 25%	0.60	100
CBY201209A152	1500 $\pm$ 25%	0.70	50

3216 TYPE

Part No.	Impedance( $\Omega$ ) At 100MHz	DCR ( $\Omega$ )Max	Ir (mA)Max
CBY321609A190	12~25	0.10	500
CBY321609A260	26 $\pm$ 25%	0.10	500
CBY321609A310	31 $\pm$ 25%	0.10	500
CBY321609A700	70 $\pm$ 25%	0.20	400
CBY321609A800	80 $\pm$ 25%	0.20	300
CBY321609A101	100 $\pm$ 25%	0.30	300
CBY321609A121	120 $\pm$ 25%	0.30	300
CBY321609A151	150 $\pm$ 25%	0.30	300
CBY321609A221	220 $\pm$ 25%	0.30	300
CBY321609A301	300 $\pm$ 25%	0.35	300
CBY321609A501	500 $\pm$ 25%	0.35	200
CBY321609A601	600 $\pm$ 25%	0.35	200
CBY321609A801	800 $\pm$ 25%	0.40	200
CBY321609A102	1000 $\pm$ 25%	0.50	200
CBY321609A122	1200 $\pm$ 25%	0.60	100
CBY321609A202	2000 $\pm$ 25% $\text{@}$ 50MHz	1.00	50

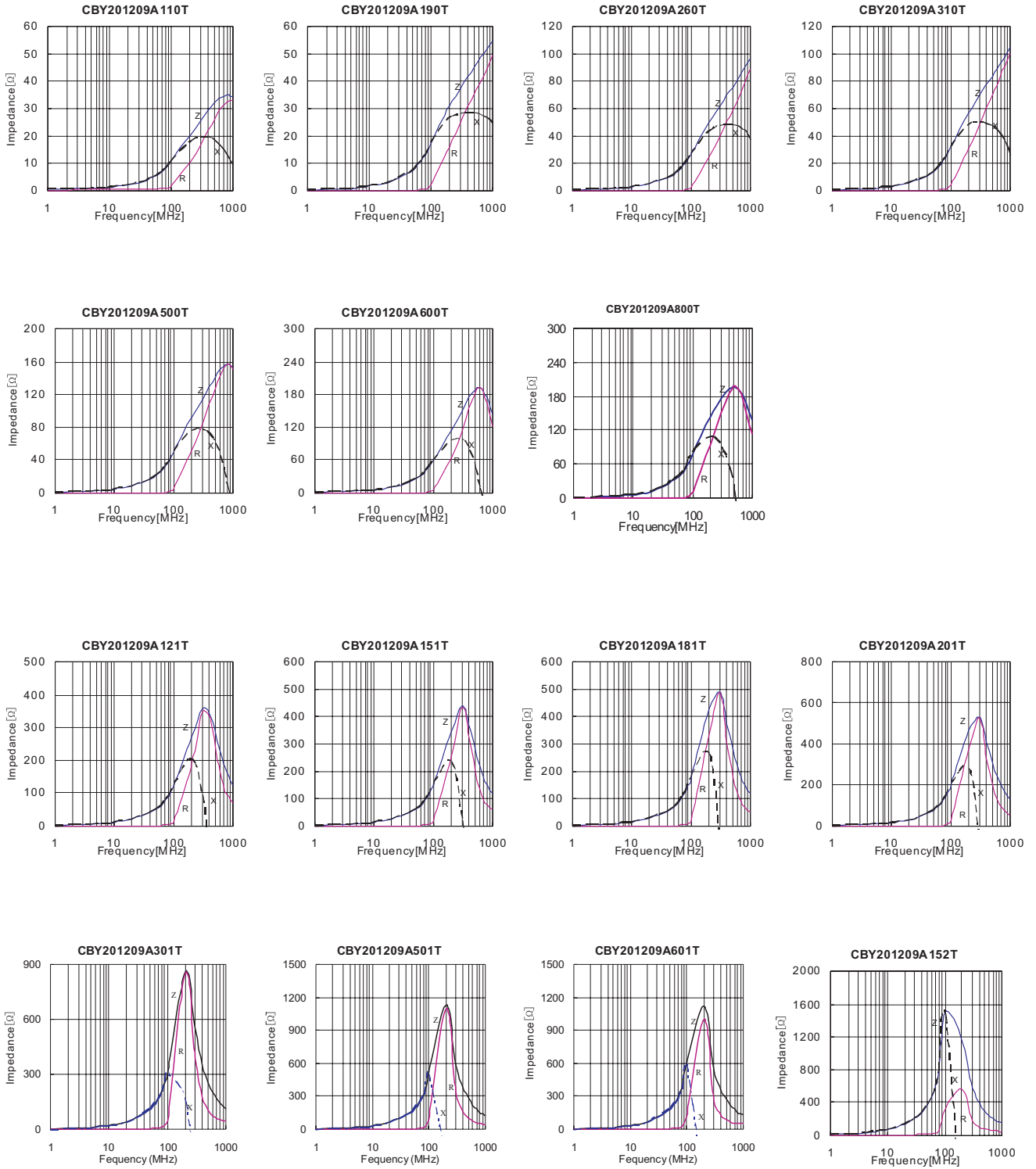
鐵氧體疊層片式磁珠 (尖峰型)  
FERRITE CHIP BEADS

1608 SERIES



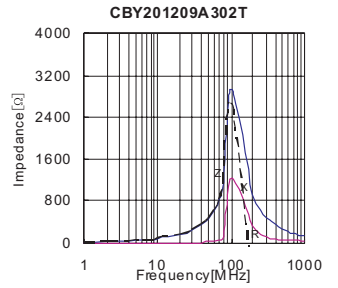
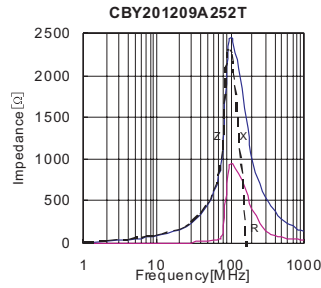
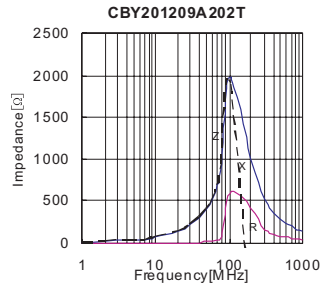
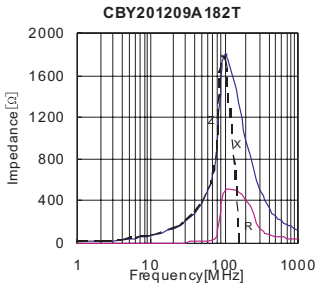
■ 鐵氧體疊層片式磁珠 (尖峰型)  
FERRITE CHIP BEADS

2012 SERIES

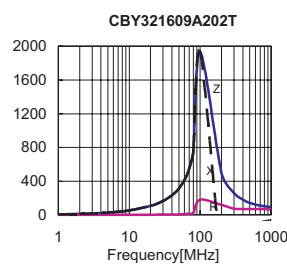
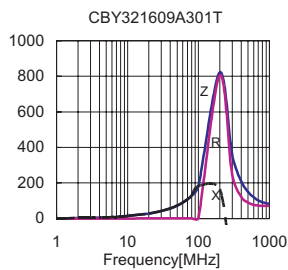
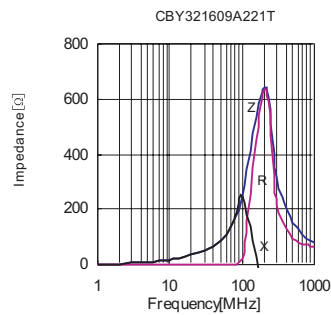
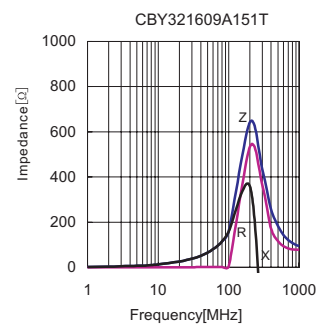
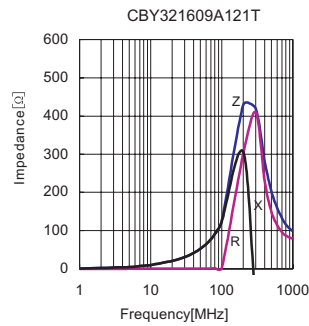
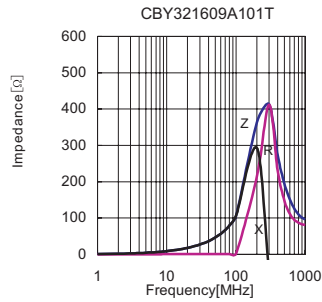
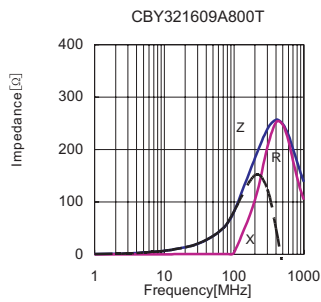
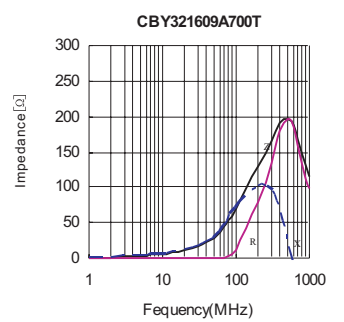
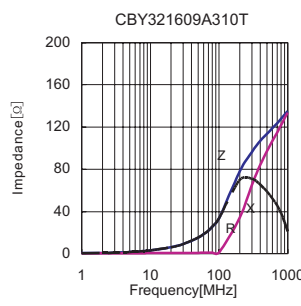
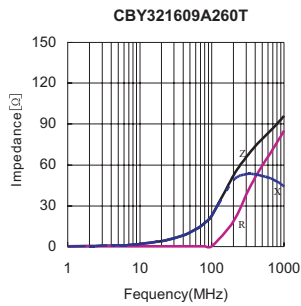
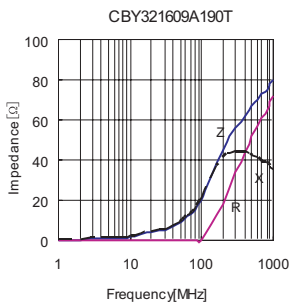


# 鐵氧體疊層片式磁珠 (尖峰型) FERRITE CHIP BEADS

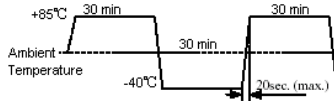
## 鐵氧體疊層片式磁珠 (尖峰型) FERRITE CHIP BEADS

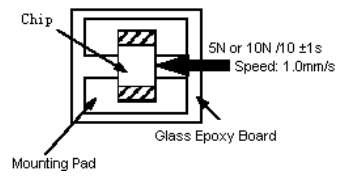
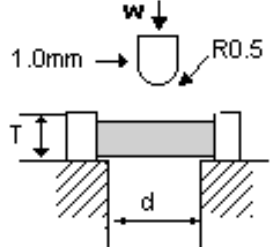


## 3216 SERIES



■ 可靠性測試  
RELIABILITY TESTING

Type	Item	Specified value	Test methods
1	Operating temperature range	-40 to +125°C	
2	Storage temperature range	-10 to +40°C	
3	Solderability	At least 90% of terminal electrode is covered by new solder	Solder temperature: 230±5°C Duration: 4±1S Preheating temperature: 120 to 150°C Preheating time: 60S immersion into the colophony flux for 3 to 5 sec. 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°C Duration: 10±0.5S Preheating temperature: 120 to 150°C Preheating time: 60S immersion into the colophony flux for 3 to 5 sec. 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 ±30% Inductor change: within ±10% Q value change(ferrite):within ±30% Q value change(ceramic):within ±20%	Temperature: -40°C for 30±3min +85°C 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°C Duration: 500 <sup>+24</sup> <sub>-0</sub> hrs
7	Loading at high temperature	Appearance: No significant abnormality. Impedance change: within ±30% Inductor change: within ±10% Q value change(ferrite):within ±30% Q value change(ceramic):within ±20%	Temperature: 85±2°C Duration: 1000 <sup>+24</sup> <sub>-0</sub> hrs Applied current: Rated current
8	Loading under Damp Heat	Appearance: No significant abnormality. Impedance change: within ±30% Inductor change : within ±10% Q value change(ferrite):within ±30% Q value change(ceramic):within ±20%	Temperature: 55±2°C Duration: 500 <sup>+24</sup> <sub>-0</sub> 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 $\pm 30\%$ Inductor change: within $\pm 10\%$ Q value change (ferrite): within $\pm 30\%$ Q value change (ceramic): within $\pm 20\%$	Amplitude: 1.5mm Directions: 2hrs each in X Y Z direction Frequency range: 10 to 55 to 10Hz (min) Aookued firce: 5N force for 1005 and 1608 series. 10N force for 2012、3216、3225、4516、4532 series. Keep time: $10 \pm 1S$								
10	Adhesion of electrode	The termination and body should be no damage	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="454 1209 949 1288"> <tbody> <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> </tbody> </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  $24 \pm 2$ hrs of recovery under the standard condition.



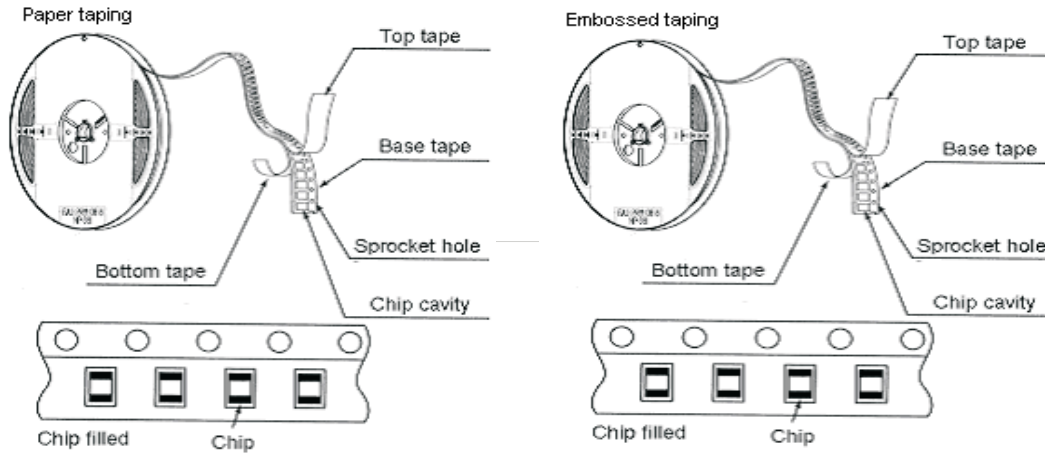
## 包裝PACKAGING

(VHF、CMI、CBG、CBW、CBH、CBY、CBA、CBM SERIES)

### STANDAE QUANTITY

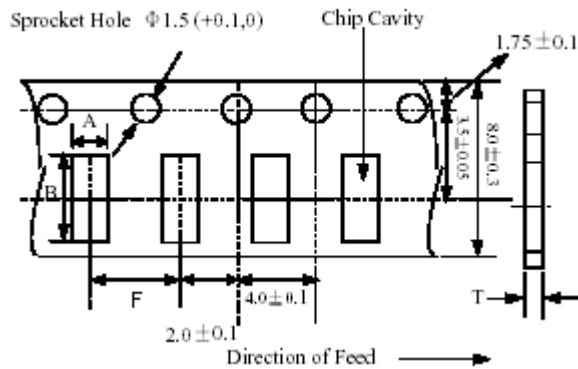
Type	1000505	160808	201209	321609	321611	322513	451616	453215	321609 (磁珠排)
Quantity(pcs)	10000	4000	4000	4000	3000	3000	5000	3000	3000

### TAPING DRAWINGS



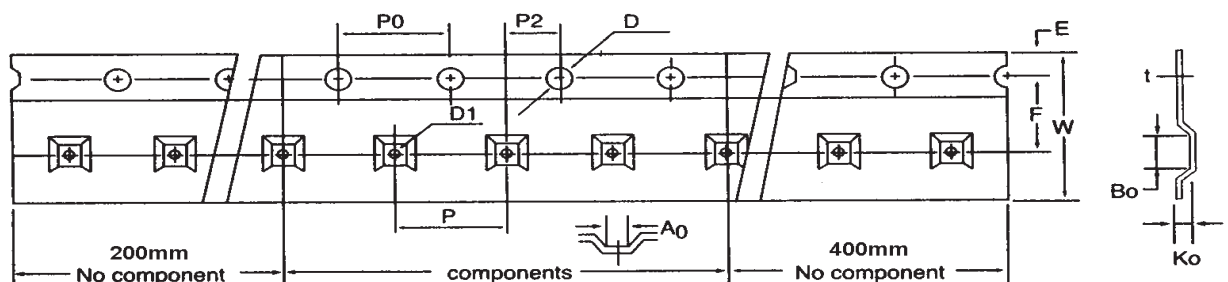
### TAPING DIMENSIONS (UNIT: mm)

#### Paper tape



Part NO.	A	B	F	T
100505	$0.65 \pm 0.1$	$1.15 \pm 0.1$	$2.0 \pm 0.05$	0.62max
160808	$1.1 \pm 0.1$	$1.9 \pm 0.1$	$4.0 \pm 0.05$	1.1max
201209	$1.5 \pm 0.1$	$2.3 \pm 0.1$	$4.0 \pm 0.05$	1.1max
321609	$1.9 \pm 0.1$	$3.5 \pm 0.1$	$4.0 \pm 0.05$	0.97max

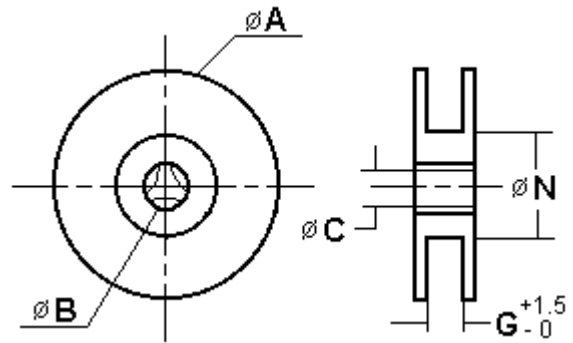
#### Embossed tape



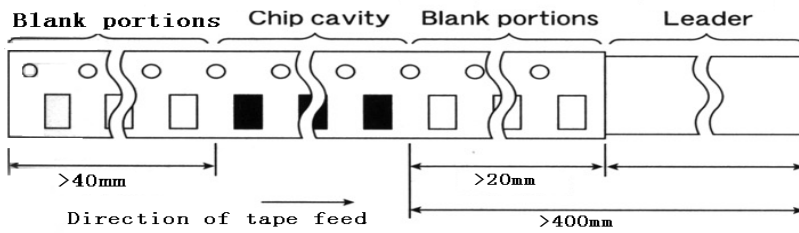
	2012	3216	3225	4516	4532	3216(磁珠排)
W	8.1+/-0.2	8.1+/-0.2	8.1+/-0.2	12.0+/-0.2	12.0+/-0.2	8.1+/-0.2
P	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	8.0+/-0.10	4.0+/-0.10
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10	5.50+/-0.10	5.50+/-0.10	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	1.55+/-0.05
D1	1.50 <sup>+0.25</sup> <sub>-0</sub>	1.50 <sup>+0.25</sup> <sub>-0</sub>	1.50 <sup>+0.25</sup> <sub>-0</sub>	1.50 <sup>+0.25</sup> <sub>-0</sub>	1.50 <sup>+0.25</sup> <sub>-0</sub>	1.50 <sup>+0.25</sup> <sub>-0</sub>
P <sub>0</sub>	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10
P <sub>0</sub> 10	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20	40.0+/-0.20
P2	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05	2.0+/-0.05
A <sub>0</sub>	1.52+/-0.10	1.90+/-0.10	2.80+/-0.10	1.93+/-0.10	3.66+/-0.10	1.90+/-0.10
B <sub>0</sub>	2.41+/-0.10	3.51+/-0.10	3.50+/-0.10	4.95+/-0.10	4.95+/-0.10	3.51+/-0.10
t	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10	0.23+/-0.10
K <sub>0</sub>	1.35+/-0.10	1.27+/-0.10	1.55+/-0.10	1.85+/-0.10	1.74+/-0.10	1.10+/-0.10

• REEL DIMENSIONS(UNIT:mm)

	A	B	C	N	G
CF-8	178±2.0	22±2.0	12.5±1.5	57±2.0	8
CF-12	330±2.0	22±2.0	12.5±1.5	98±2.0	12



• LEADER AND BLANK PORTION



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

