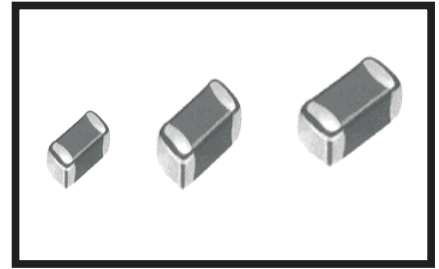


鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

鐵氧體疊層片式磁珠(大電流型) FERRITE CHIP BEADS

OPERATING TEMP. -40~+85℃



● 特征FEATURES:

- 在同樣的尺寸下較插裝磁珠可產生較高的阻抗值
- 與傳統的磁珠不同，片式磁珠無引線，只要簡單的安裝到PCB板上就可抑制EMI和RFI
- 磁珠的形狀和尺寸都符合EIA標準，可以利用SMT設備進行自動貼裝
- A unique terminal electrode structure ensures ensures permissible current 6.0A (max).
- High impedance and EMI suppression effective over a wide frequency range.
- Suitable reflow and wave soldering.

● 應用APPLICATIONS

- 用于數據傳輸線、信號線、電源部分及回路的抗干擾。
- Digital videos、communication equipment、OA equipment and others.

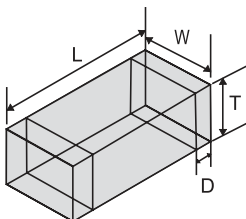
● 產品規格型號的表示方法 ORDERING CODE

CBW 201209 U 121 T
① ② ③ ④ ⑤

① 產品代號 Product Code		② 規格尺寸(L×W×T) (mm) Dimensions		③ 材料代號 Material Code	④ 阻抗(Ω) Impedance		⑤ 包裝方式 Packaging Style	
CBW	大電流磁珠	100505	1.0×0.5×0.5	U	實例	11	T	卷帶盤裝
	MULTILAYER CHIP POWER BEADS	160808	1.6×0.8×0.8		Example		B	Tape & Reel
		201209	2.0×1.2×0.9		110	30		散裝 Bulk
		321609	3.2×1.6×1.1		300	1000		
		322513	3.2×2.5×1.3		102			
		451616	4.5×1.6×1.6					
		453215	4.5×3.2×1.5					

● 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 (0.035±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)
322513 (1210)	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.3±0.2 (0.051±0.008)	0.5±0.3 (0.020±0.012)
451616 (1806)	4.5±0.2 (0.186±0.008)	1.6±0.2 (0.063±0.008)	1.6±0.2 (0.063±0.008)	0.5±0.3 (0.020±0.012)
453215 (1812)	4.5±0.2 (0.180±0.008)	3.2±0.2 (0.126±0.008)	1.5±0.2 (0.060±0.008)	0.5±0.3 (0.020±0.012)

• 電性能參數 ELECTRICAL CHARACTERISTICS

1005 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW100505U070	0~11	0.04	0.80
CBW100505U190	12~25	0.06	0.70
CBW100505U260	26 $\pm$ 25%	0.06	0.70
CBW100505U310	31 $\pm$ 25%	0.08	0.70
CBW100505U600	60 $\pm$ 25%	0.15	0.60
CBW100505U101	100 $\pm$ 25%	0.20	0.45
CBW100505U121	120 $\pm$ 25%	0.25	0.45
CBW100505U151	150 $\pm$ 25%	0.25	0.45
CBW100505U201	200 $\pm$ 25%	0.40	0.30
CBW100505U301	300 $\pm$ 25%	0.50	0.30
CBW100505U501	500 $\pm$ 25%	0.65	0.20
CBW100505U601	600 $\pm$ 25%	0.70	0.20
CBW100505U801	800 $\pm$ 25%	0.90	0.20

1608 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW160808U110	7~15	0.08	1.0
CBW160808U190	12~25	0.08	1.0
CBW160808U260	26 $\pm$ 25%	0.08	1.0
CBW160808U310	31 $\pm$ 25%	0.08	1.0
CBW160808U800	80 $\pm$ 25%	0.20	1.0
CBW160808U101	100 $\pm$ 25%	0.20	1.0
CBW160808U121	120 $\pm$ 25%	0.20	1.0
CBW160808U151	150 $\pm$ 25%	0.25	1.0
CBW160808U181	180 $\pm$ 25%	0.25	1.0
CBW160808U221	220 $\pm$ 25%	0.30	1.0
CBW160808U301	300 $\pm$ 25%	0.30	1.0
CBW160808U501	500 $\pm$ 25%	0.40	1.0
CBW160808U601	600 $\pm$ 25%	0.40	1.0
CBW160808U801	800 $\pm$ 25%	0.55	0.5
CBW160808U102	1000 $\pm$ 25%	0.55	0.5
CBW160808U122	1200 $\pm$ 25%	0.65	0.5
CBW160808U152	1500 $\pm$ 25%	0.75	0.4
CBW160808U182	1800 $\pm$ 25%	0.75	0.4
CBW160808U202	2000 $\pm$ 25%	0.90	0.4

鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

2012 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW201209U050	0~15	0.03	3
CBW201209U110	7~15	0.03	3
CBW201209U260	26 $\pm$ 25%	0.05	3
CBW201209U310	31 $\pm$ 25%	0.05	3
CBW201209U500	50 $\pm$ 25%	0.05	3
CBW201209U600	60 $\pm$ 25%	0.05	3
CBW201209U800	80 $\pm$ 25%	0.05	3
CBW201209U121	120 $\pm$ 25%	0.10	2
CBW201209U151	150 $\pm$ 25%	0.10	2
CBW201209U181	180 $\pm$ 25%	0.15	2
CBW201209U221	220 $\pm$ 25%	0.15	2
CBW201209U301	300 $\pm$ 25%	0.20	2
CBW201209U501	500 $\pm$ 25%	0.25	1.5
CBW201209U601	600 $\pm$ 25%	0.25	1.5
CBW201209U801	800 $\pm$ 25%	0.40	0.8
CBW201209U102	1000 $\pm$ 25%	0.40	0.8
CBW201209U122	1200 $\pm$ 25%	0.45	0.5
CBW201209U202	2000 $\pm$ 25%	0.50	0.3

3216 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW321609U050	0~15	0.04	4
CBW321609U090	5~13	0.05	4
CBW321609U110	7~15	0.05	4
CBW321609U190	12~25	0.05	3
CBW321609U260	26 $\pm$ 25%	0.05	3
CBW321609U310	31 $\pm$ 25%	0.08	3
CBW321609U600	60 $\pm$ 25%	0.10	3
CBW321609U800	80 $\pm$ 25%	0.10	3
CBW321609U101	100 $\pm$ 25%	0.10	3
CBW321609U151	150 $\pm$ 25%	0.15	2.5
CBW321609U181	180 $\pm$ 25%	0.20	2.5
CBW321609U221	220 $\pm$ 25%	0.20	2.5
CBW321609U301	300 $\pm$ 25%	0.20	2
CBW321609U501	500 $\pm$ 25%	0.20	2
CBW321609U601	600 $\pm$ 25%	0.25	2
CBW321609U801	800 $\pm$ 25%	0.25	2
CBW321609U102	1000 $\pm$ 25%	0.30	2
CBW321609U122	1200 $\pm$ 25%	0.35	1

3225 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW322513U190	12~25	0.05	5
CBW322513U260	26 $\pm$ 25%	0.05	5
CBW322513U310	31 $\pm$ 25%	0.05	5
CBW322513U600	60 $\pm$ 25%	0.06	4
CBW322513U800	80 $\pm$ 25%	0.08	3
CBW322513U121	120 $\pm$ 25%	0.10	3
CBW322513U151	150 $\pm$ 25%	0.10	3
CBW322513U181	180 $\pm$ 25%	0.15	3
CBW322513U221	220 $\pm$ 25%	0.15	3
CBW322513U301	300 $\pm$ 25%	0.15	3
CBW322515U501	500 $\pm$ 25%	0.15	2
CBW322513U601	600 $\pm$ 25%	0.20	2
CBW322513U801	800 $\pm$ 25%	0.25	2
CBW322513U102	1000 $\pm$ 25%	0.30	2

4516 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW451616U260	26 $\pm$ 25%	0.05	3
CBW451616U310	31 $\pm$ 25%	0.05	3
CBW451616U800	80 $\pm$ 25%	0.08	3
CBW451616U900	90 $\pm$ 25%	0.10	3
CBW451616U121	120 $\pm$ 25%	0.10	3
CBW451616U151	150 $\pm$ 25%	0.10	3
CBW451616U221	220 $\pm$ 25%	0.15	2
CBW451616U301	300 $\pm$ 25%	0.20	2
CBW451616U501	500 $\pm$ 25%	0.25	1
CBW451616U601	600 $\pm$ 25%	0.30	1
CBW451616U801	800 $\pm$ 25%	0.30	1

4532 TYPE

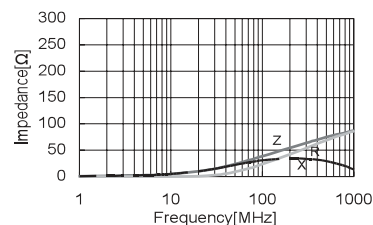
Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBW453215U190	12~25	0.05	5
CBW453215U260	26 $\pm$ 25%	0.05	5
CBW453215U380	38 $\pm$ 25%	0.06	5
CBW453215U700	70 $\pm$ 25%	0.06	4
CBW453215U800	80 $\pm$ 25%	0.08	4
CBW453215U101	100 $\pm$ 25%	0.08	4
CBW453215U121	120 $\pm$ 25%	0.08	4
CBW453215U151	150 $\pm$ 25%	0.10	3
CBW453215U221	220 $\pm$ 25%	0.15	2
CBW453215U301	500 $\pm$ 25%	0.15	2
CBW453215U501	300 $\pm$ 25%	0.20	1
CBW453215U601	600 $\pm$ 25%	0.25	1
CBW453215U801	800 $\pm$ 25%	0.30	1
CBW453215U102	1000 $\pm$ 25%	0.35	0.8

鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

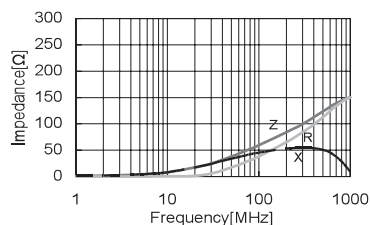
鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

1005 SERIES

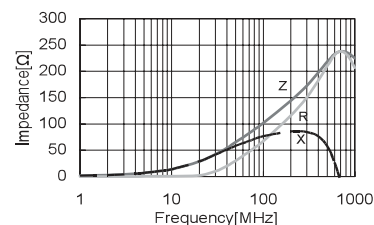
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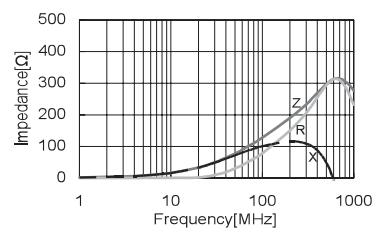
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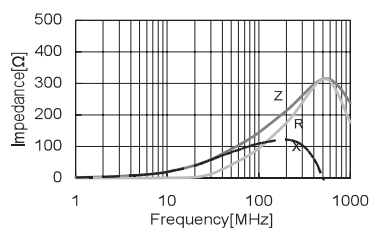
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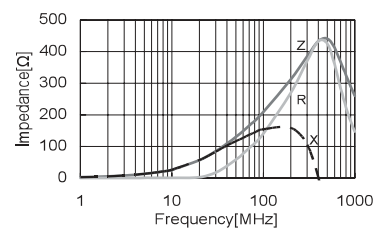
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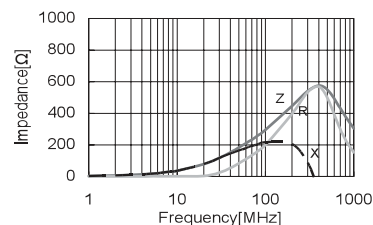
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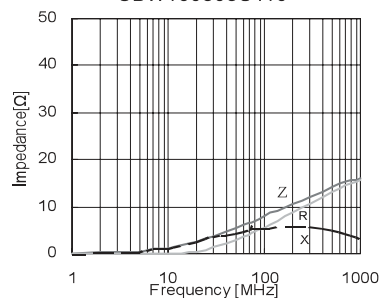


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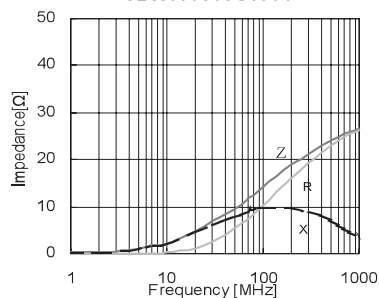


1608 SERIES

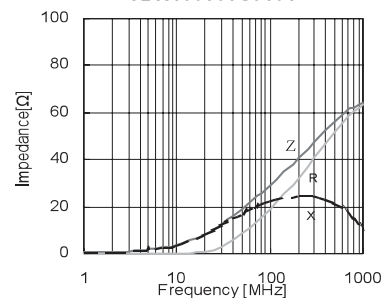
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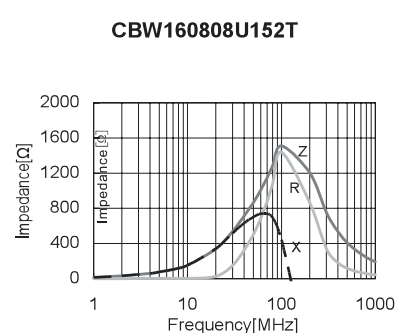
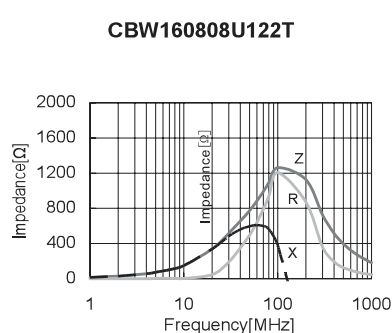
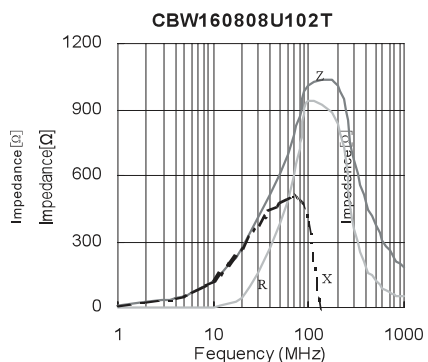
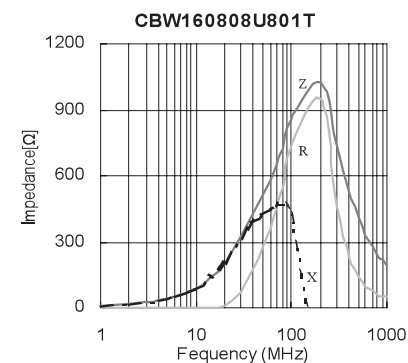
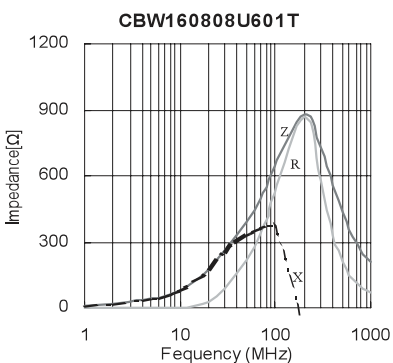
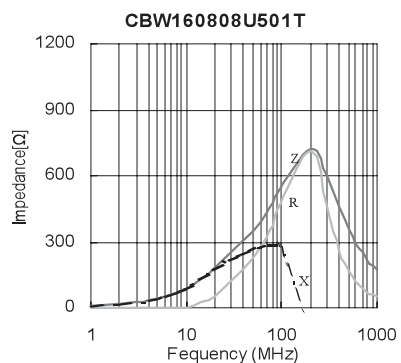
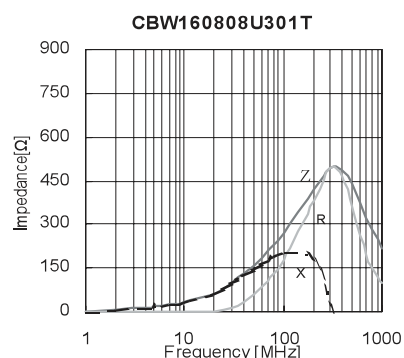
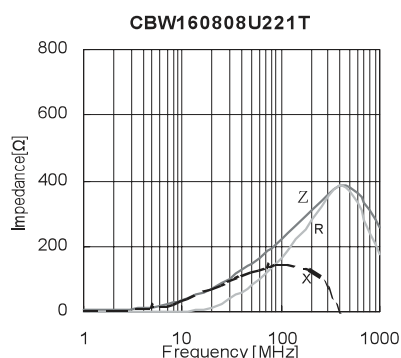
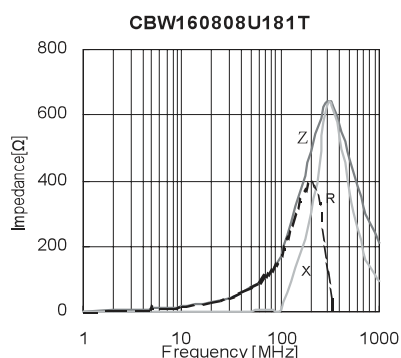
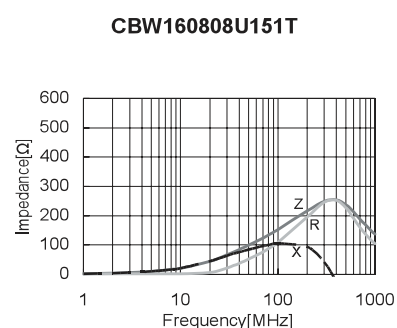
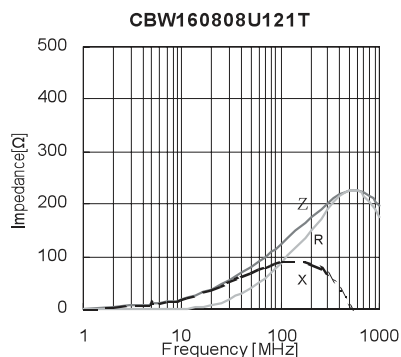
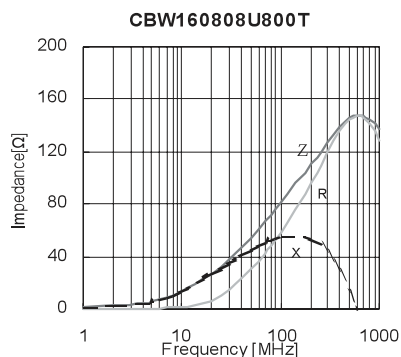
CBW160808U190T



CBW160808U310T



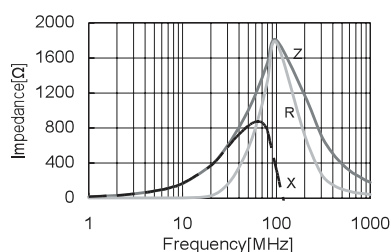
鐵氧體疊層片式磁珠 (大電流型) FERRITE CHIP BEADS



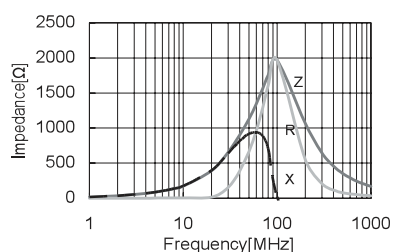
鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

CBW160808U182T

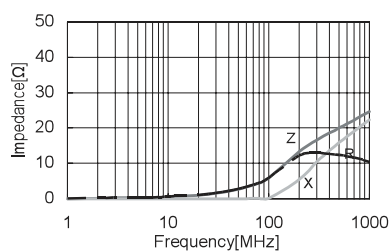


CBW160808U202T

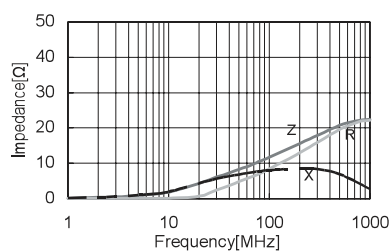


2012 SERIES

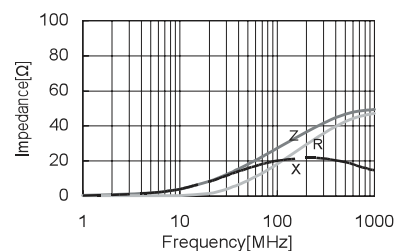
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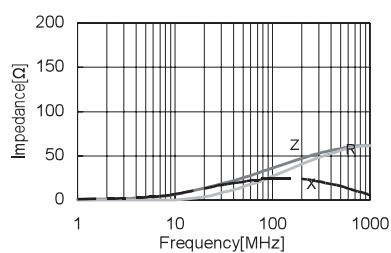
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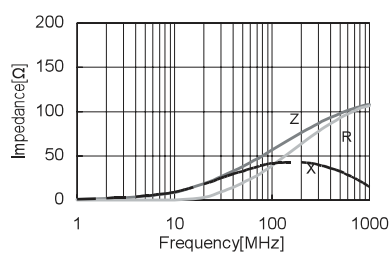
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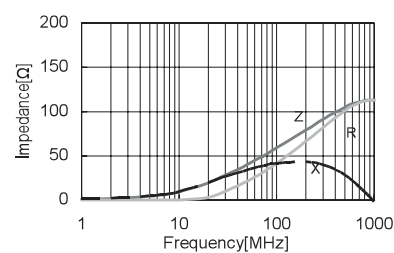
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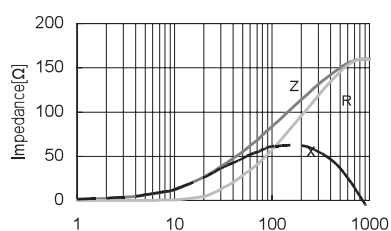
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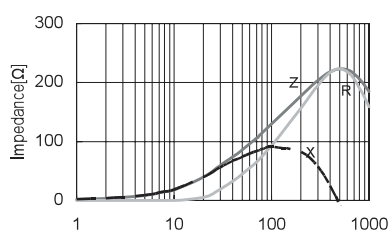
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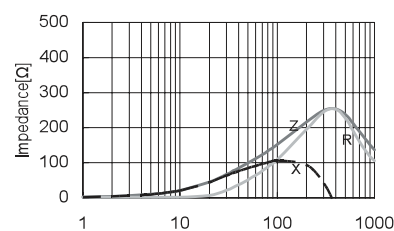
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CBW201209U121T



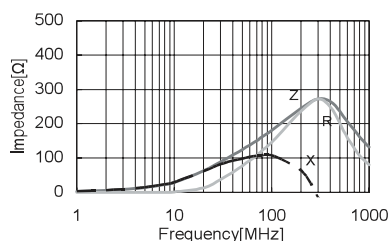
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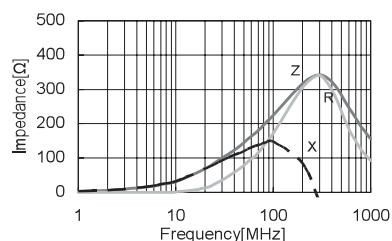
鐵氧體疊層片式磁珠 (大電流型)

FERRITE CHIP BEADS

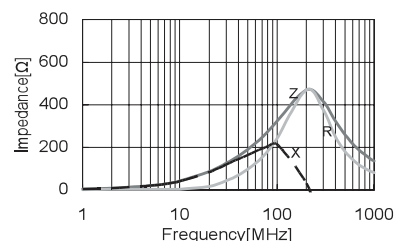
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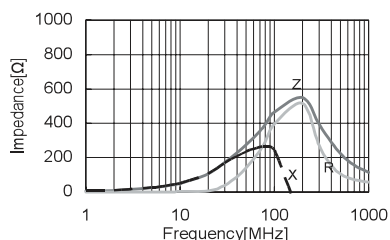
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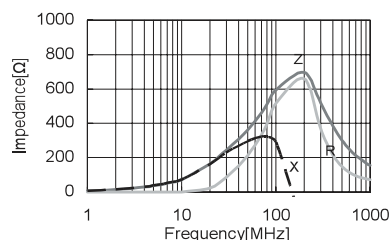
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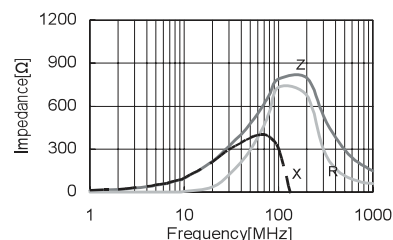
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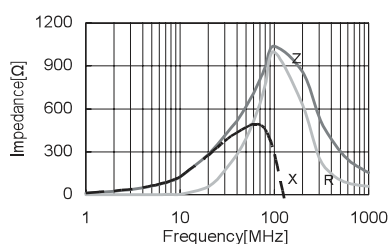
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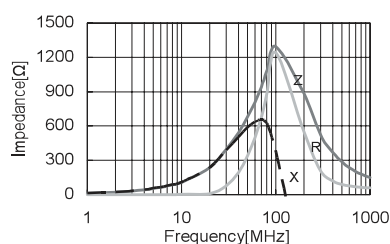
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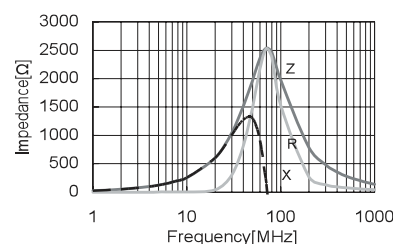
CBW201209U102T



CBW201209U122T

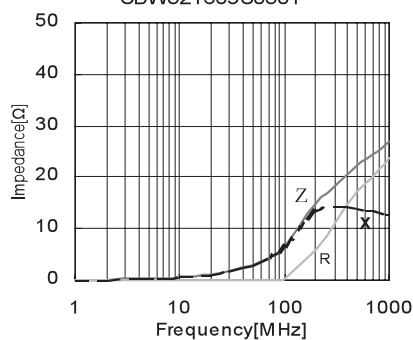


CBW201209U202T

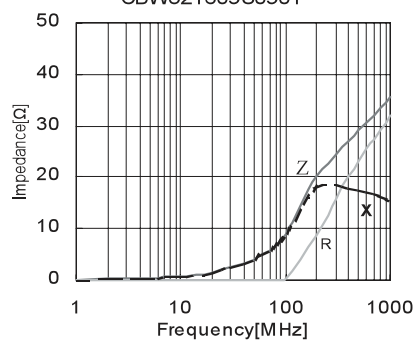


3216 ERIES

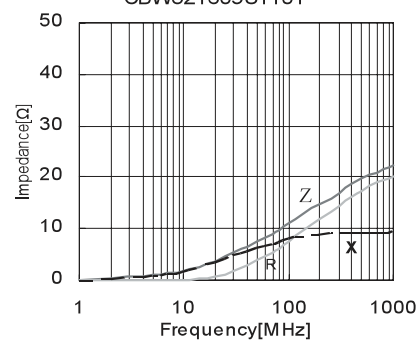
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CBW321609U090T



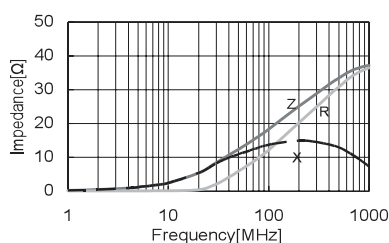
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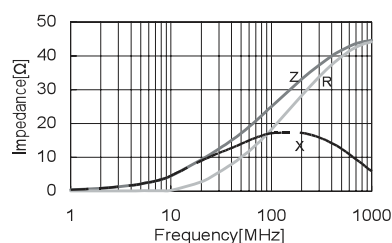
鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

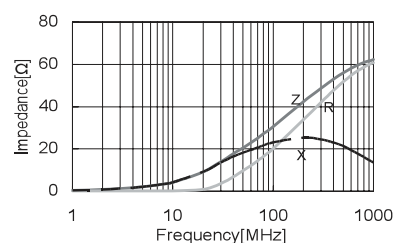
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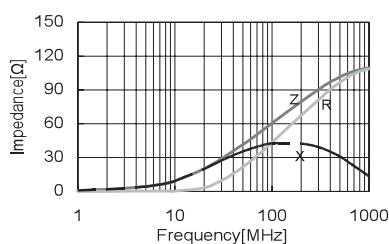
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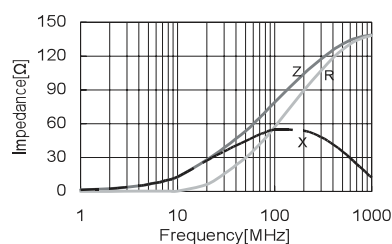
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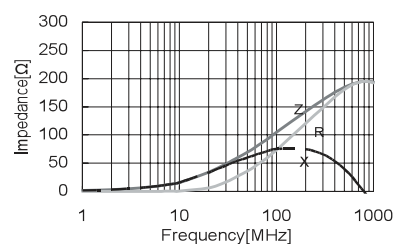
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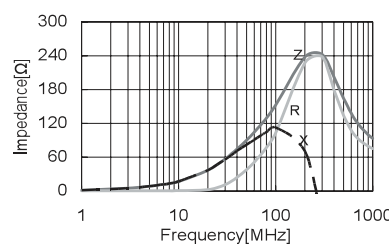
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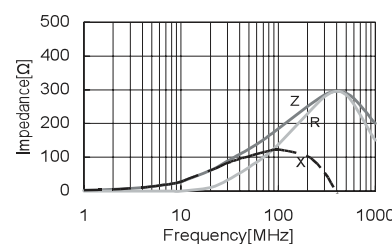
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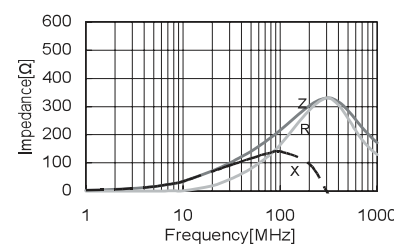
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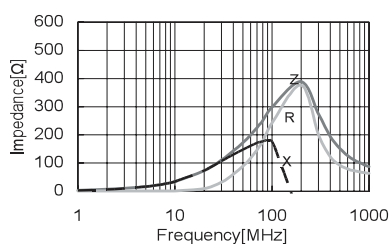
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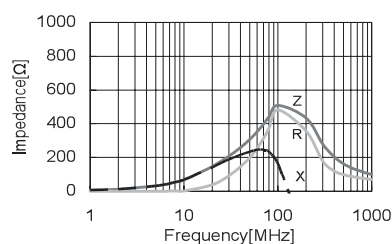
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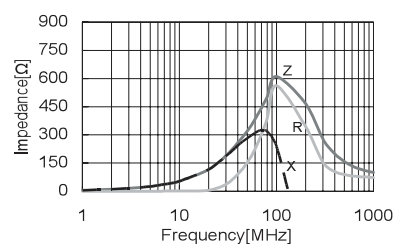
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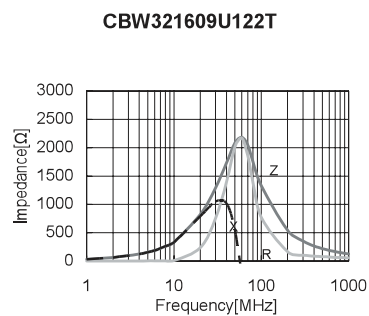
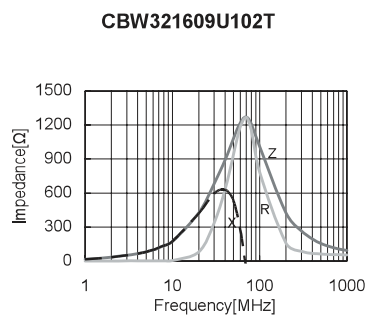
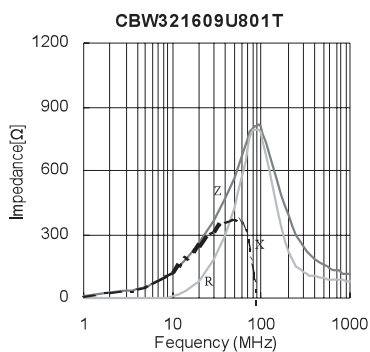
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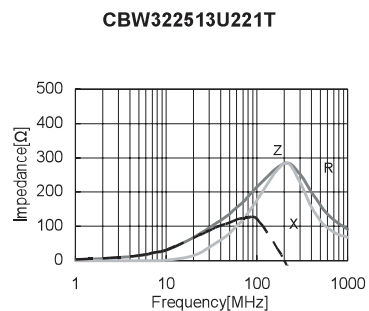
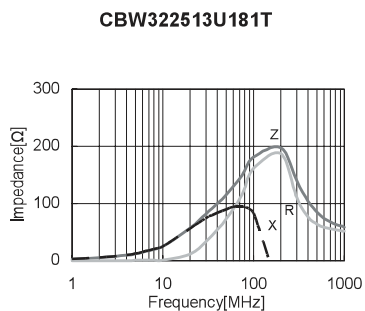
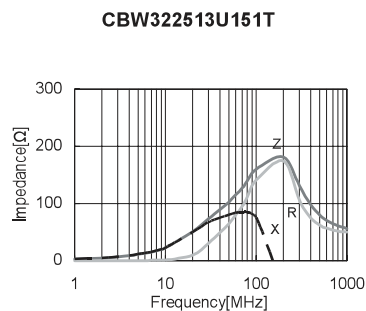
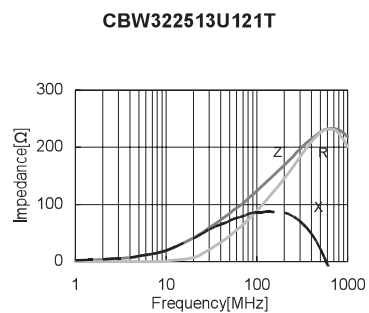
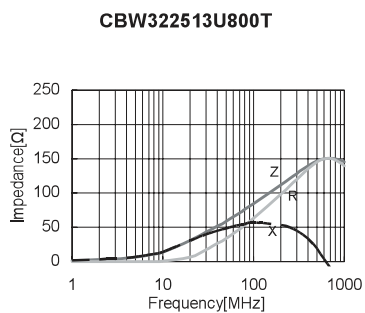
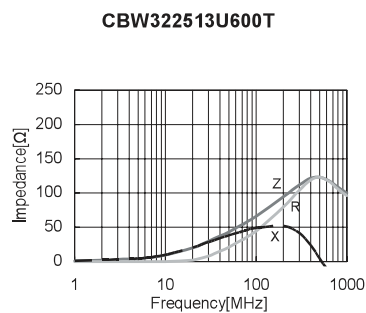
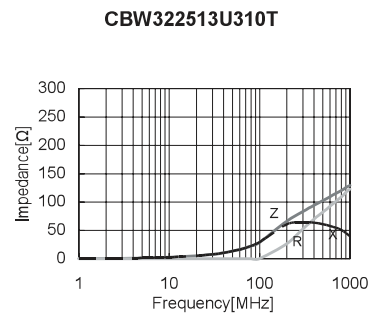
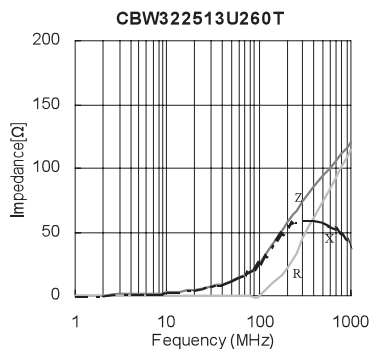
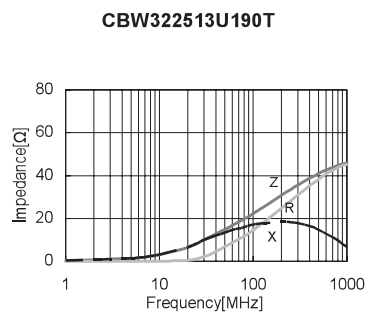
CBW321609U601T



鐵氧體疊層片式磁珠 (大電流型) FERRITE CHIP BEADS

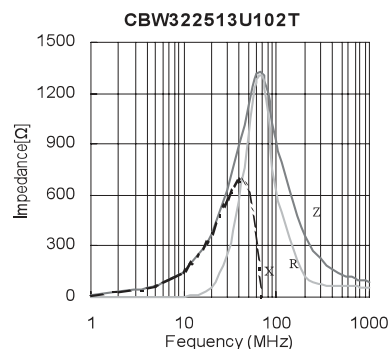
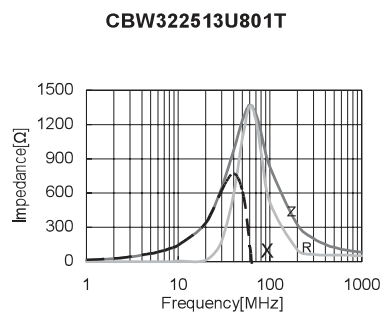
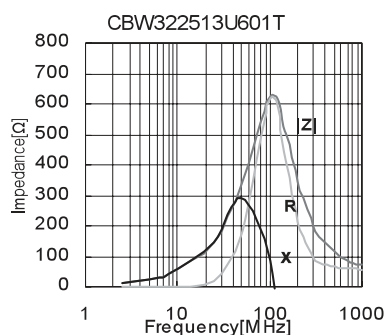


3225 SERIES

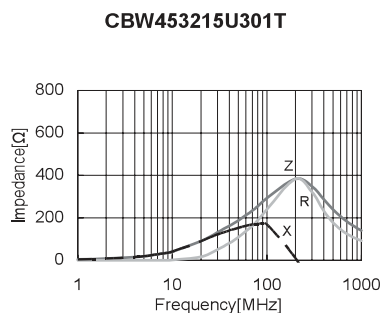
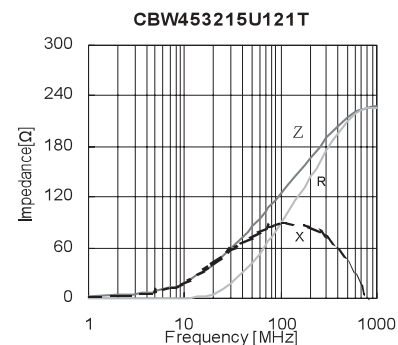
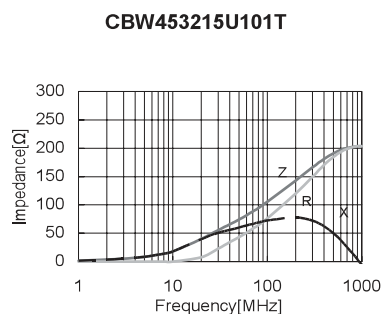
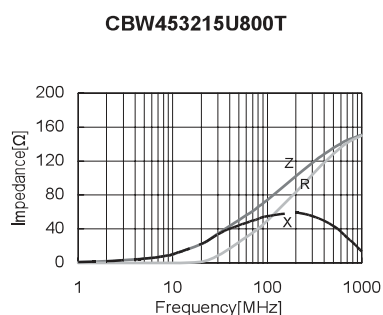
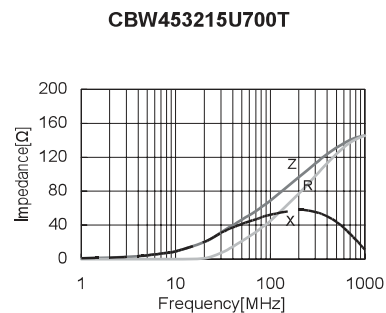
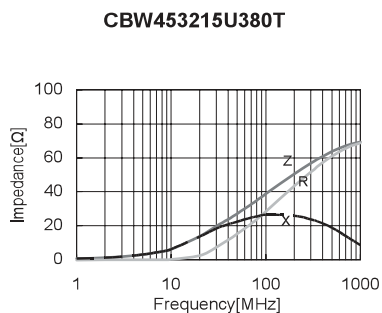
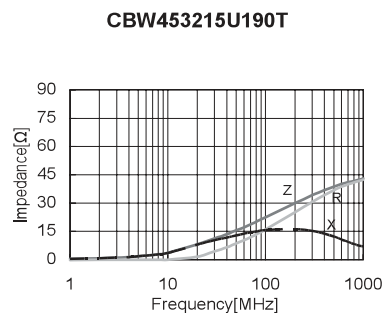


鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

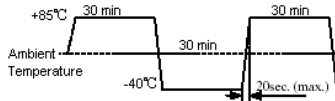
鐵氧體疊層片式磁珠（大電流型） FERRITE CHIP BEADS

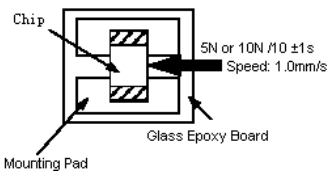
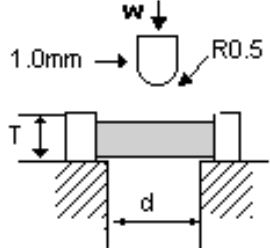


4532 SERIES



■ 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: $230 \pm 5^\circ\text{C}$ Duration: $4 \pm 1\text{S}$ 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 $\pm 20\%$ Inductor change: within $\pm 10\%$	Solder temperature: $260 \pm 5^\circ\text{C}$ Duration: $10 \pm 0.5\text{S}$ 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 $\pm 30\%$ Inductor change: within $\pm 10\%$ Q value change(ferrite): within $\pm 30\%$ Q value change(ceramic): within $\pm 20\%$	Temperature: -40°C for $30 \pm 3\text{min}$ $+85^\circ\text{C}$ for $30 \pm 3\text{min}$ 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: $-55 \pm 2^\circ\text{C}$ Duration: 500^{+24}_{-0} hrs
7	Loading at high temperature	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 $\pm 20\%$	Temperature: $85 \pm 2^\circ\text{C}$ Duration: 1000^{+24}_{-0} hrs Applied current: Rated current
8	Loading under Damp Heat	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 $\pm 20\%$	Temperature: $55 \pm 2^\circ\text{C}$ Duration: 500^{+24}_{-0} 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 Zdirection Frequency range: 10 to 55to 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"> <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 $\pm$ 2hrs of recovery under the standard condition.

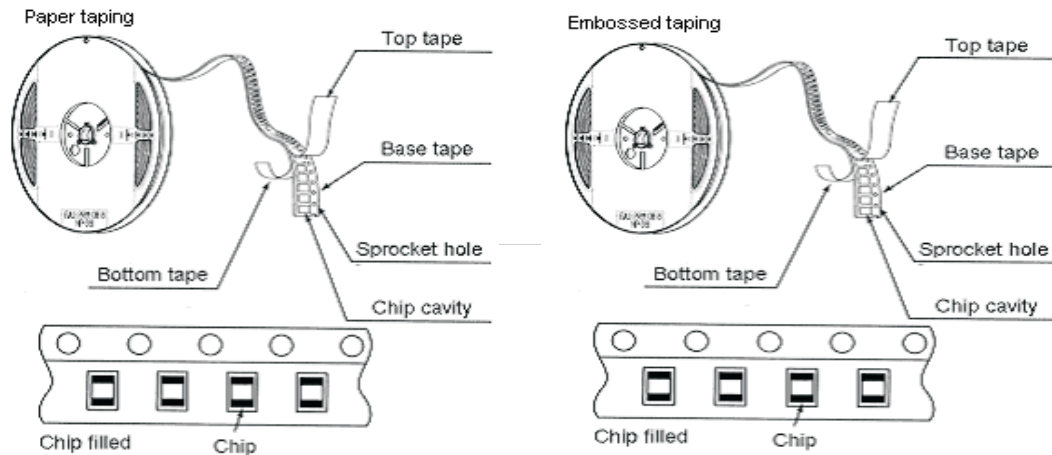
包裝PACKAGING

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

STANDAE QUANTITY

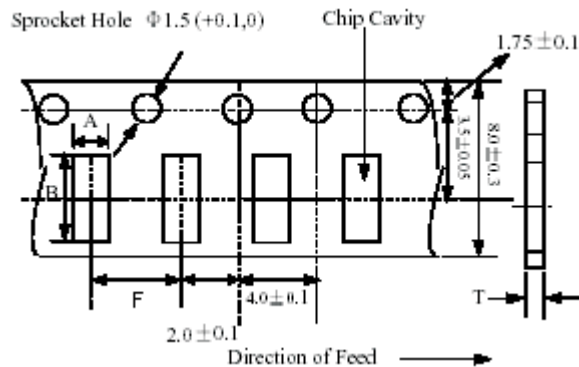
Type	1000505	160808	201209	321609	321611	322513	451616	453215	321609 (磁珠排)
Quantity(pcs)	10000	4000	4000	4000	3000	3000	5000	3000	3000

TAPING DRAWINGS



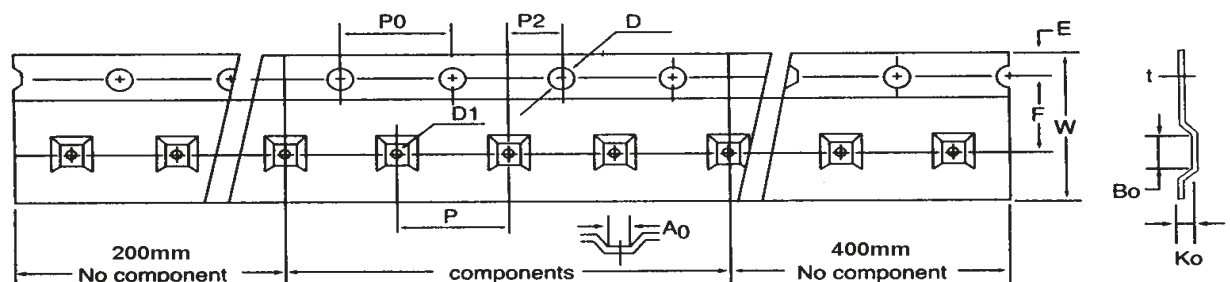
TAPING DIMENSIONS (UNIT: mm)

Paper tape



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

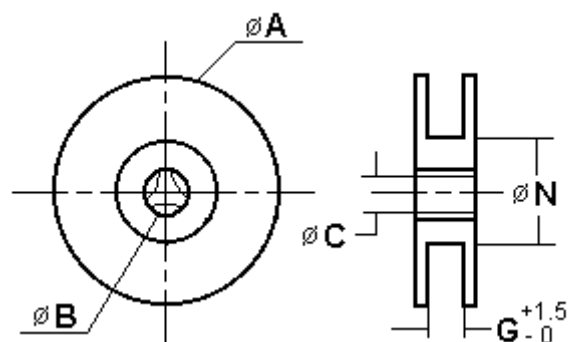
Embossed tape



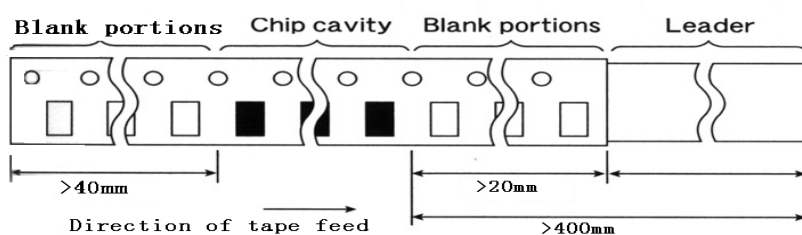
	2012	3216	3225	4516	4532	3216 (磁珠排)
W	8.1+/-0.2	8.1+/-0.2	8.1+/-0.2	12.0+/-0.2	12.0+/-0.2	8.1+/-0.2
P	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	8.0+/-0.10	4.0+/-0.10
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10	5.50+/-0.10	5.50+/-0.10	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 ^{+0.25} ₋₀	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	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	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 ₀	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 ₀	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 ₀	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.

