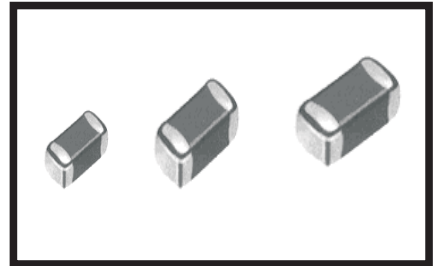


鐵氧體疊層片式磁珠 (超大電流型) FERRITE CHIP BEADS

鐵氧體疊層片式磁珠 (超大電流型) FERRITE CHIP BEADS

OPERATING TEMP.	-40~+85°C
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● 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

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

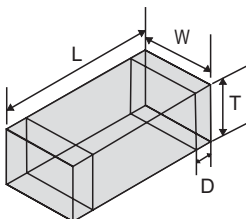
● 產品規格型號的表示方法 ORDERING CODE

$\frac{CBM}{\textcircled{1}}$ $\frac{201209}{\textcircled{2}}$ $\frac{U}{\textcircled{3}}$ $\frac{121}{\textcircled{4}}$ $\frac{T}{\textcircled{5}}$

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	
CBM	超大電流 磁珠 MULTILAYER CHIP POWER BEADS	100505	1.0×0.5×0.5	U Y	實例 Example		T	卷帶盤裝 Tape & Reel
		160808	1.6×0.8×0.8		110	11	B	散裝 Bulk
		201209	2.0×1.2×0.9		300	30		
		321609	3.2×1.6×0.9		102	1000		
		322513	3.2×2.5×1.3					
		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
CBM100505U070	0~11	0.03	1.8
CBM100505U190	12~25	0.03	1.8
CBM100505U260	26 \pm 25%	0.05	1.5
CBM100505U300	30 \pm 25%	0.05	1.5
CBM100505U600	60 \pm 25%	0.08	1.0
CBM100505U101	100 \pm 25%	0.15	0.8
CBM100505U121	120 \pm 25%	0.15	0.8
CBM100505U151	150 \pm 25%	0.20	0.7
CBM100505U201	200 \pm 25%	0.25	0.7
CBM100505U301	300 \pm 25%	0.30	0.6
CBM100505U501	500 \pm 25%	0.40	0.5
CBM100505U601	600 \pm 25%	0.50	0.5
CBM100505U801	800 \pm 25%	0.65	0.3

1608 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBM160808U110	7~15	0.01	6.0
CBM160808U190	12~25	0.01	6.0
CBM160808U260	26 \pm 25%	0.02	4.0
CBM160808U300	30 \pm 25%	0.02	4.0
CBM160808U800	80 \pm 25%	0.06	2.5
CBM160808U101	100 \pm 25%	0.06	2.5
CBM160808U121	120 \pm 25%	0.06	2.5
CBM160808U151	150 \pm 25%	0.07	1.5
CBM160808U181	180 \pm 25%	0.07	1.5
CBM160808U221	220 \pm 25%	0.12	1.5
CBM160808U301	300 \pm 25%	0.18	1.0
CBM160808U501	500 \pm 25%	0.18	1.0
CBM160808U601	600 \pm 25%	0.18	1.0
CBM160808U801	800 \pm 25%	0.30	0.7
CBM160808U102	1000 \pm 25%	0.40	0.6
CBM160808U122	1200 \pm 25%	0.70	0.5
CBM160808U152	1500 \pm 25%	0.80	0.4
CBM160808U182	1800 \pm 25%	0.80	0.4
CBM160808U202	2000 \pm 25%	1.00	0.4

鐵氧體疊層片式磁珠 (超大電流型)
FERRITE CHIP BEADS

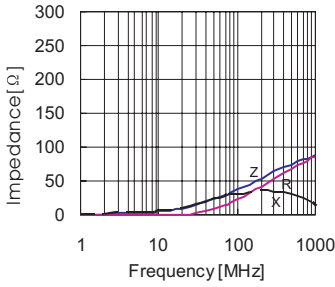
2012 TYPE

Part No.	Impedance(Ω) At 100MHz	DCR (Ω)Max	Ir (A)Max
CBM201209U050	0~15	0.01	6.0
CBM201209U110	7~15	0.01	6.0
CBM201209U260	26 \pm 25%	0.01	6.0
CBM201209U300	30 \pm 25%	0.01	6.0
CBM201209U500	50 \pm 25%	0.03	3.5
CBM201209U600	60 \pm 25%	0.03	3.5
CBM201209U800	80 \pm 25%	0.03	3.5
CBM201209U121	120 \pm 25%	0.05	3.5
CBM201209U151	150 \pm 25%	0.08	3.0
CBM201209U181	180 \pm 25%	0.08	3.0
CBM201209U221	220 \pm 25%	0.08	3.0
CBM201209U301	300 \pm 25%	0.08	2.5
CBM201209U501	500 \pm 25%	0.10	2.0
CBM201209U601	600 \pm 25%	0.10	2.0
CBM201209U801	800 \pm 25%	0.12	1.5
CBM201209U102	1000 \pm 25%	0.12	1.5
CBM201209U122	1200 \pm 25%	0.20	0.8
CBM201209U152	152 \pm 25%	0.50	0.3

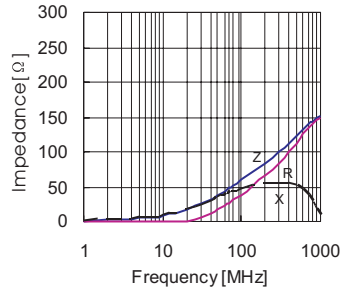
■ 鐵氧體疊層片式磁珠 (超大電流型)
FERRITE CHIP BEADS

1005 SERIES

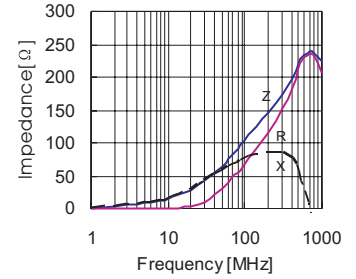
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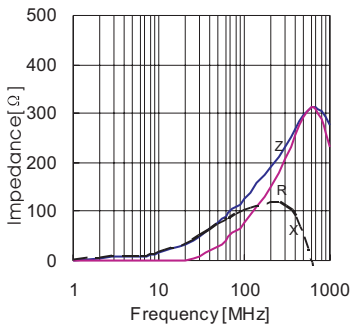
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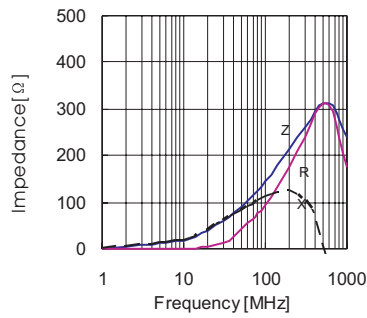
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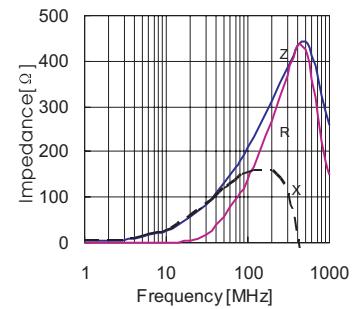
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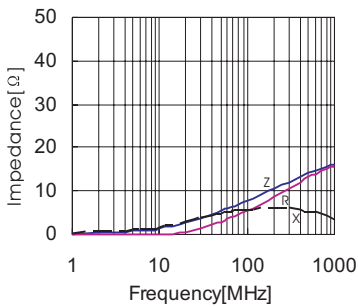


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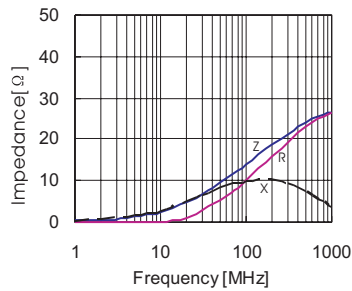


1608 SERIES

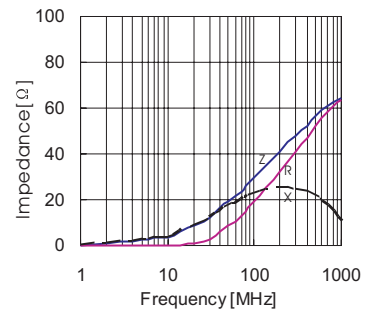
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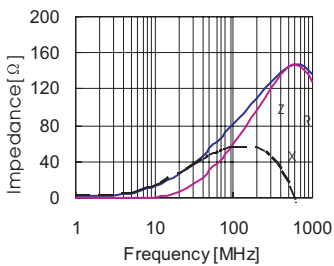
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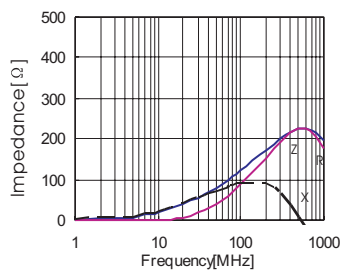
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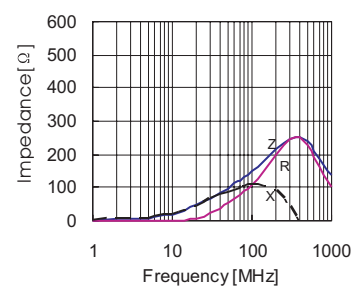
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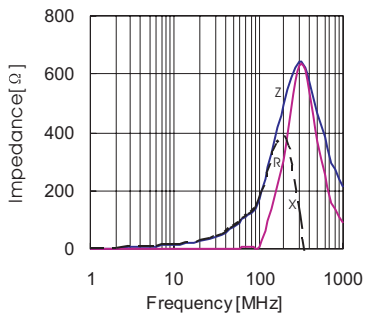


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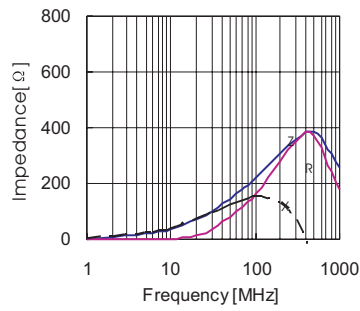


鐵氧體疊層片式磁珠 (超大電流型) FERRITE CHIP BEADS

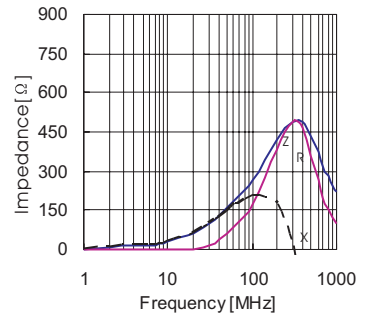
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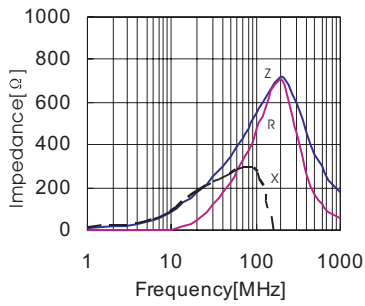
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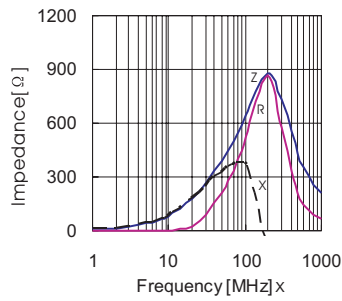
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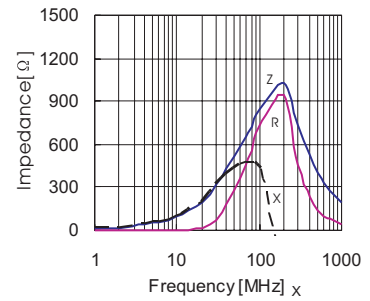
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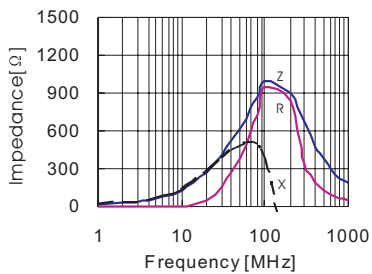
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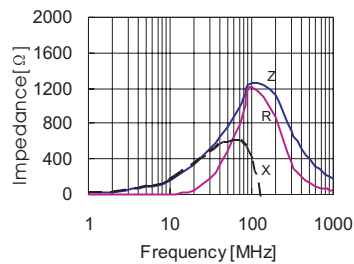
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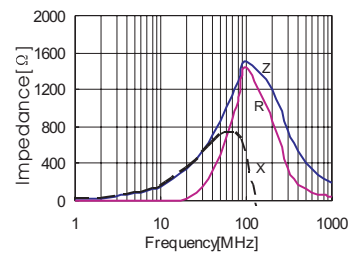
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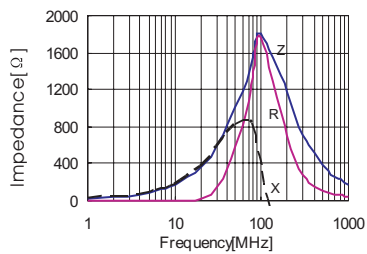
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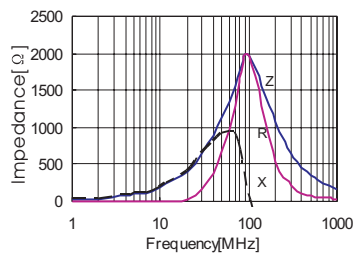
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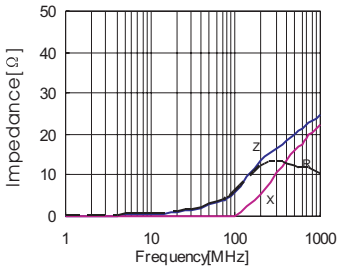
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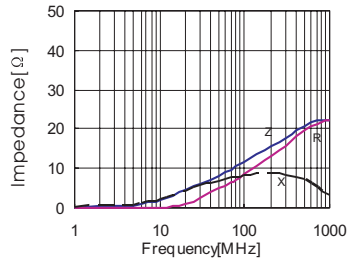
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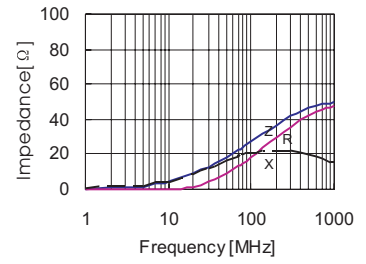
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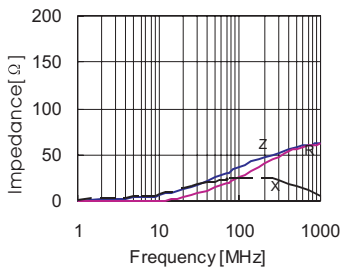
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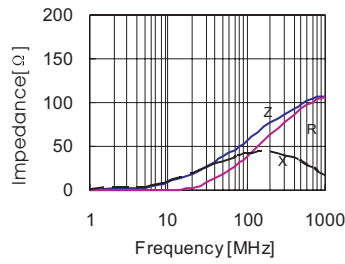
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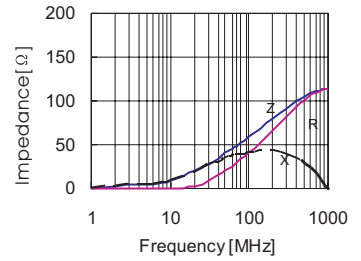
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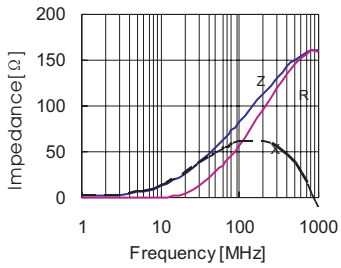
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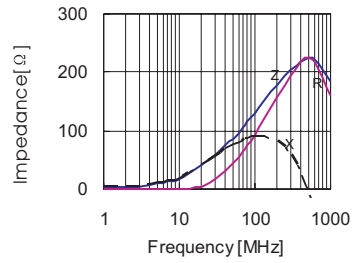
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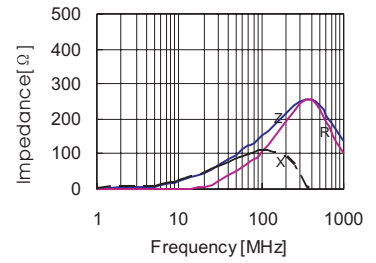
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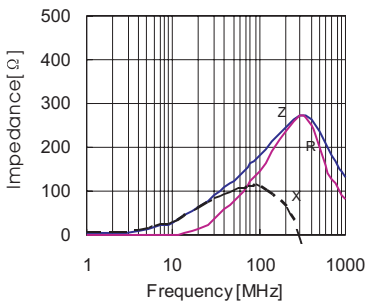
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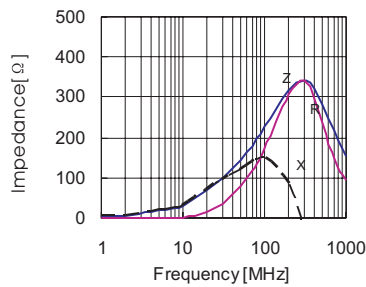
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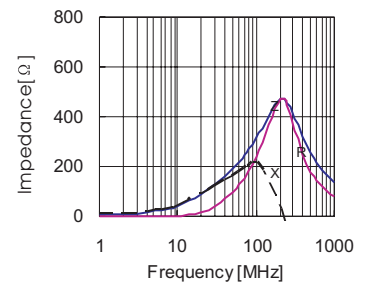
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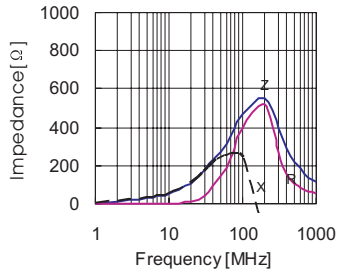


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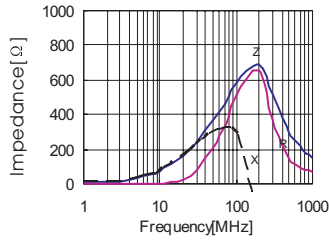


鐵氧體疊層片式磁珠 (超大電流型) FERRITE CHIP BEADS

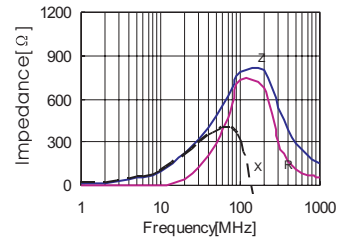
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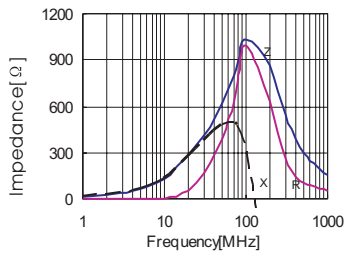
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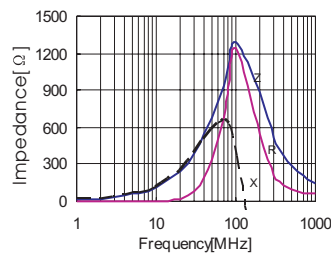
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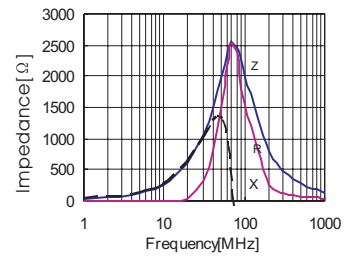
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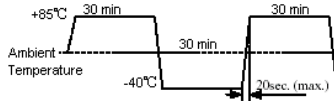
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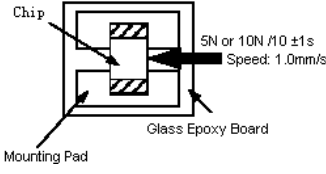
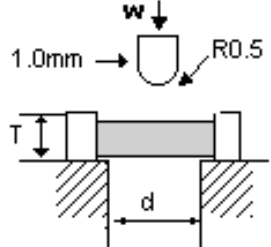


CBM201209U152T



■ 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 ⁺²⁴ ₋₀ 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 ⁺²⁴ ₋₀ 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 ⁺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 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 ± 2 hrs of recovery under the standard condition.

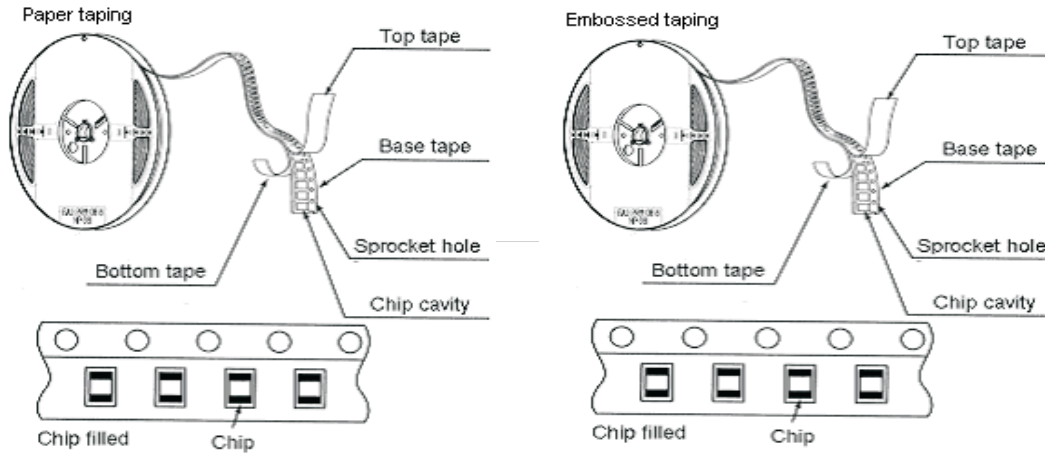
包裝PACKAGING

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

STANDAE QUANTITY

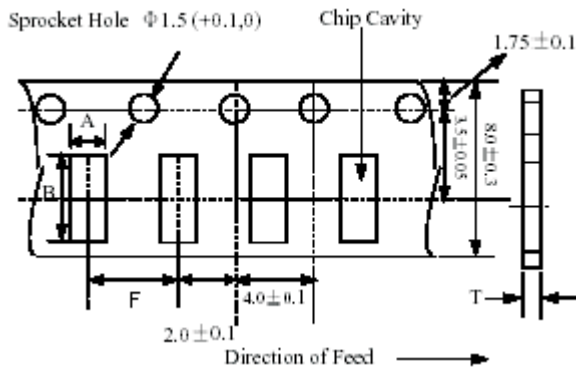
Type	1000505	160808	201209	321609	321611	322513	451616	453215	321609 (磁珠排)
Quantity(pcs)	10000	4000	4000	4000	3000	3000	5000	3000	3000

TAPING DRAWINGS



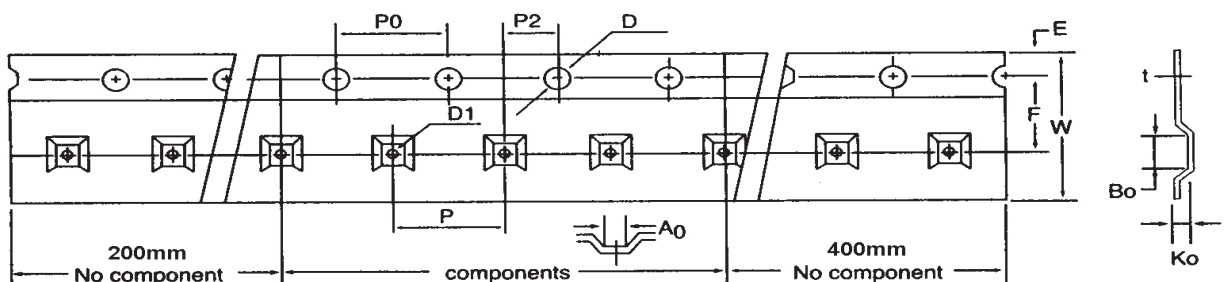
TAPING DIMENSIONS (UNIT: mm)

Paper tape



Part NO.	A	B	F	T
100505	0.65 ± 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

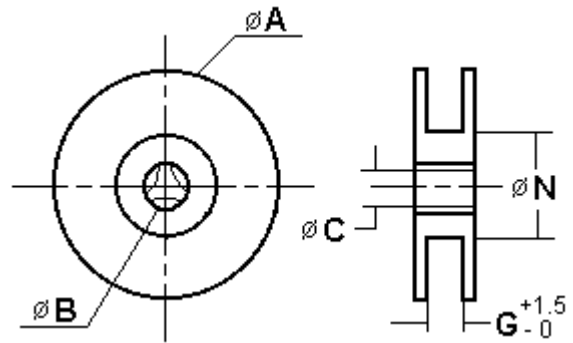
Embossed tape



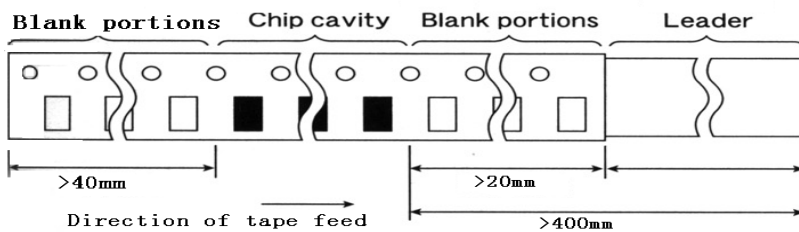
	2012	3216	3225	4516	4532	3216(磁珠排)
W	8.1+/-0.2	8.1+/-0.2	8.1+/-0.2	12.0+/-0.2	12.0+/-0.2	8.1+/-0.2
P	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	4.0+/-0.10	8.0+/-0.10	4.0+/-0.10
E	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10	1.75+/-0.10
F	3.50+/-0.10	3.50+/-0.10	3.50+/-0.10	5.50+/-0.10	5.50+/-0.10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

