

**SMD Multilayer Ferrite Chip Beads-HNBQ Series-CA****FEATURES**

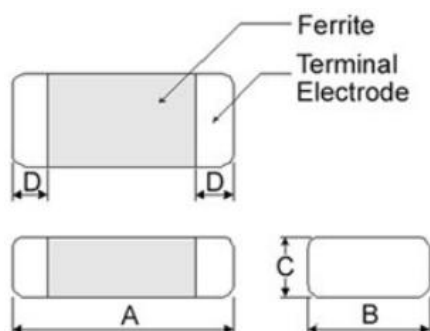
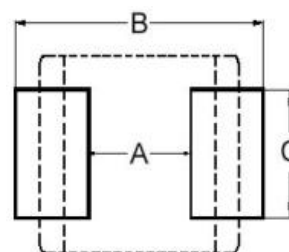
- \* Product symbol: HSB, HGB, HPB, HUPB, HNB, HF, HVPB
- \* Packaging: T: Tape and Reel; B: Bulk
- \* Tolerance: Y =  $\pm 25\%$ ; M =  $\pm 20\%$ ; T:  $\pm 30\%$
- \* Note: RoHS Compliant

**ORDERING CODE(标志示例)**

**HNBQ**    □□□□    -    □□□    □    -    **CA**

(1)                    (2)                    (3)                    (4)                    (5)

- (1) HNBQ 向华料号 Part Number  
 (2) 尺寸 Dimensions  
 (3) 电感量 Inductance  
 (4) 电感量公差 Inductance Tolerance  
 (5) 尾码 Tail code

**Shape and Dimensions****Recommended Pattern****Dimensions in mm**

| TYPE    | A              | B               | C              | D               |
|---------|----------------|-----------------|----------------|-----------------|
| ①060303 | 0.6 $\pm$ 0.03 | 0.30 $\pm$ 0.03 | 0.3 $\pm$ 0.03 | 0.15 $\pm$ 0.05 |
| ②100505 | 1.0 $\pm$ 0.10 | 0.50 $\pm$ 0.10 | 0.5 $\pm$ 0.10 | 0.25 $\pm$ 0.10 |
| ③160805 | 1.6 $\pm$ 0.15 | 0.80 $\pm$ 0.15 | 0.5 $\pm$ 0.15 | 0.3 $\pm$ 0.2   |
| ④160808 | 1.6 $\pm$ 0.15 | 0.80 $\pm$ 0.15 | 0.8 $\pm$ 0.15 | 0.3 $\pm$ 0.2   |
| ⑤201209 | 2.0 $\pm$ 0.20 | 1.25 $\pm$ 0.20 | 0.9 $\pm$ 0.20 | 0.5 $\pm$ 0.3   |
| ⑥321611 | 3.2 $\pm$ 0.20 | 1.60 $\pm$ 0.20 | 1.1 $\pm$ 0.20 | 0.5 $\pm$ 0.3   |

| TYPE    | A       | B         | C       |
|---------|---------|-----------|---------|
| ①060303 | 0.2~0.3 | 0.75~1.05 | 0.30    |
| ②100505 | 0.40    | 1.2~1.4   | 0.50    |
| ③160805 | 0.7~0.8 | 1.8~2.0   | 0.6~0.8 |
| ④160808 | 0.7~0.8 | 1.8~2.0   | 0.6~0.8 |
| ⑤201209 | 1.0~1.2 | 2.6~4.0   | 1.0~1.2 |
| ⑥321611 | 2.00    | 4.2~5.2   | 1.20    |

**Dimension Conversion**

| Code   | Dimension in mm<br>(A×B×C) | EIA  |
|--------|----------------------------|------|
| 060303 | 0.6X0.3X0.3                | 0201 |
| 100505 | 1.0X0.5X0.5                | 0402 |
| 160805 | 1.6X0.8X0.5                | 0603 |
| 160808 | 1.6X0.8X0.8                | 0603 |
| 201209 | 2.0X1.2X0.9                | 0805 |
| 321611 | 3.2X1.6X1.1                | 1206 |



## SMD Multilayer Ferrite Chip Beads-HNBQ060303 Series-CA

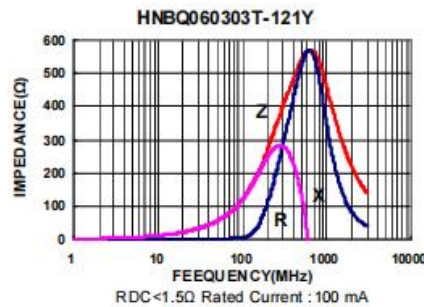
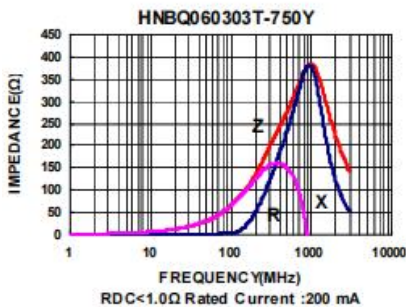
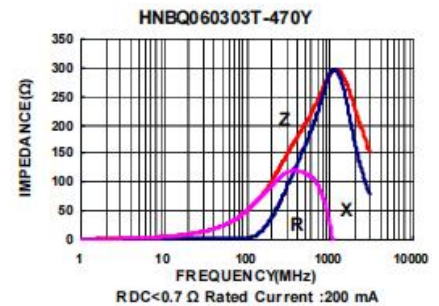
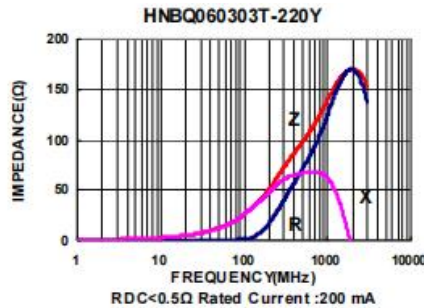
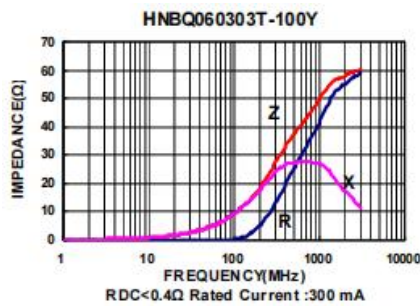
### HNBQ060303 series Electrical Characteristics

| Part No.            | Impedance    | Tolerance   | Test Freq.<br>(MHz) | RDC             | Rated current |
|---------------------|--------------|-------------|---------------------|-----------------|---------------|
|                     | ( $\Omega$ ) | ( $\pm\%$ ) |                     | ( $\Omega$ )Max | (mA)Max       |
| HNBQ060303T-100Y-CA | 10           | 25          | 100                 | 0.4             | 300           |
| HNBQ060303T-220Y-CA | 22           | 25          | 100                 | 0.5             | 200           |
| HNBQ060303T-470Y-CA | 47           | 25          | 100                 | 0.7             | 200           |
| HNBQ060303T-750Y-CA | 75           | 25          | 100                 | 1.0             | 200           |
| HNBQ060303T-121Y-CA | 120          | 25          | 100                 | 1.50            | 100           |

**Note:** When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

- Operating temperature range—55°C~125°C(Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than 30°C

**Test Instruments:** Agilent E4991A Impedance / Material Analyzer



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.



## SMD Multilayer Ferrite Chip Beads-HNBQ100505 Series-CA

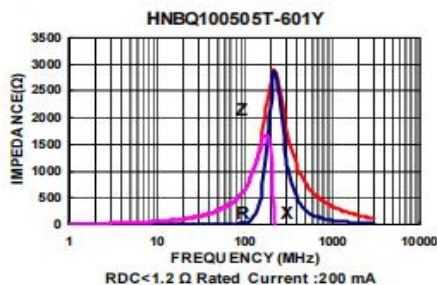
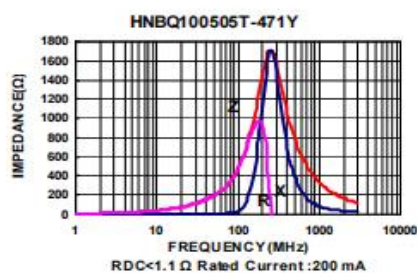
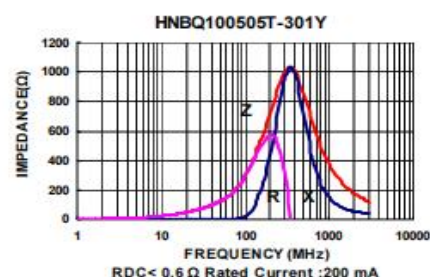
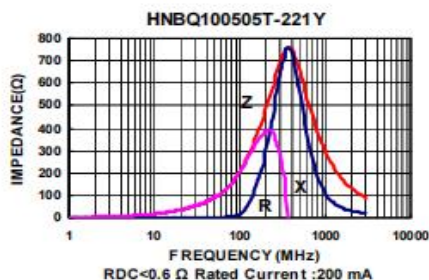
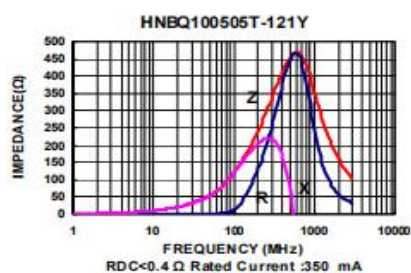
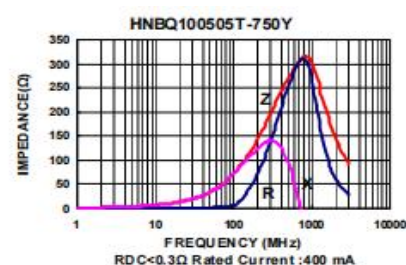
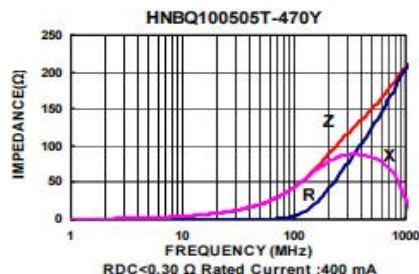
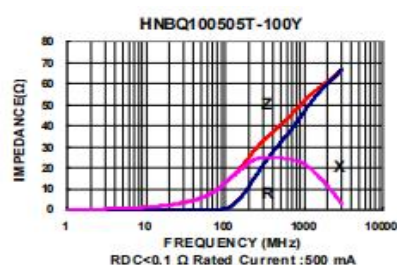
### HNBQ100505 series Electrical Characteristics

| Part No.            | Impedance    | Tolerance   | Test Freq.<br>(MHz) | RDC             | Rated current |
|---------------------|--------------|-------------|---------------------|-----------------|---------------|
|                     | ( $\Omega$ ) | ( $\pm\%$ ) |                     | ( $\Omega$ )Max | (mA)Max       |
| HNBQ100505T-100Y-CA | 10           | 25          | 100                 | 0.10            | 500           |
| HNBQ100505T-470Y-CA | 47           | 25          | 100                 | 0.30            | 400           |
| HNBQ100505T-750Y-CA | 75           | 25          | 100                 | 0.30            | 400           |
| HNBQ100505T-121Y-CA | 120          | 25          | 100                 | 0.40            | 350           |
| HNBQ100505T-221Y-CA | 220          | 25          | 100                 | 0.60            | 200           |
| HNBQ100505T-331Y-CA | 330          | 25          | 100                 | 0.80            | 200           |
| HNBQ100505T-471Y-CA | 470          | 25          | 100                 | 1.10            | 200           |
| HNBQ100505T-601Y-CA | 600          | 25          | 100                 | 1.20            | 200           |

**Note:** When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

- Operating temperature range— $55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

### Test Instruments: Agilent E4991A Impedance / Material Analyzer



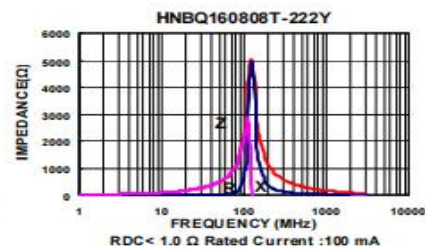
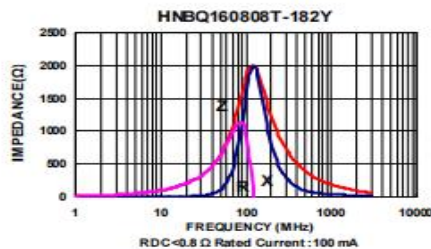
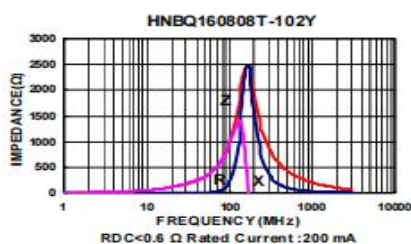
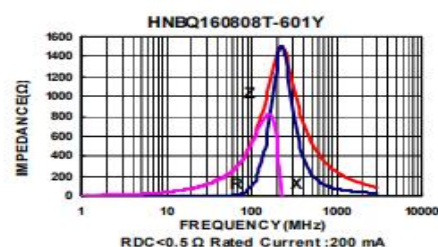
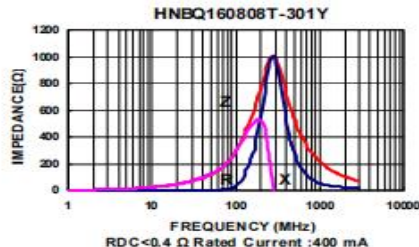
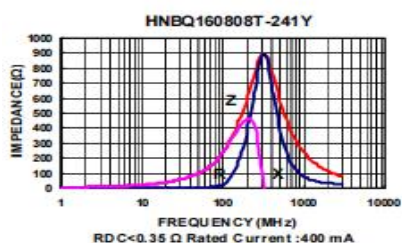
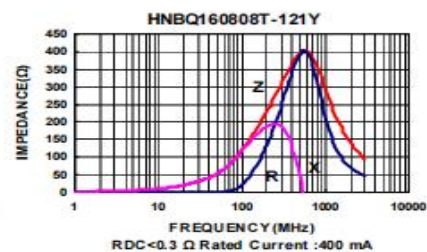
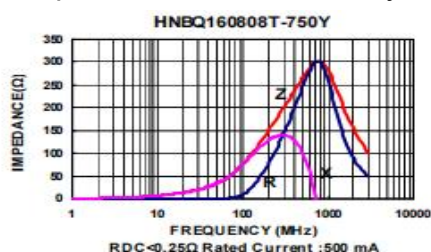
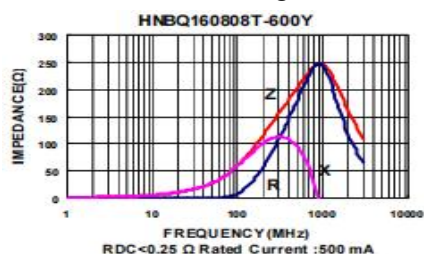
Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.

**SMD Multilayer Ferrite Chip Beads-HNBQ160808 Series-CA****HNBQ160808 series Electrical Characteristics**

| Part No.            | Impedance    | Tolerance   | Test Freq.<br>(MHz) | RDC             | Rated current |
|---------------------|--------------|-------------|---------------------|-----------------|---------------|
|                     | ( $\Omega$ ) | ( $\pm\%$ ) |                     | ( $\Omega$ )Max | (mA)Max       |
| HNBQ160808T-600Y-CA | 60           | 25          | 100                 | 0.25            | 500           |
| HNBQ160808T-750Y-CA | 75           | 25          | 100                 | 0.25            | 500           |
| HNBQ160808T-121Y-CA | 120          | 25          | 100                 | 0.30            | 400           |
| HNBQ160808T-241Y-CA | 240          | 25          | 100                 | 0.35            | 400           |
| HNBQ160808T-301Y-CA | 300          | 25          | 100                 | 0.40            | 400           |
| HNBQ160808T-601Y-CA | 600          | 25          | 100                 | 0.50            | 200           |
| HNBQ160808T-102Y-CA | 1000         | 25          | 100                 | 0.60            | 200           |
| HNBQ160808T-182Y-CA | 1800         | 25          | 100                 | 0.80            | 100           |
| HNBQ160808T-222Y-CA | 2200         | 25          | 100                 | 1.00            | 100           |
| HNBQ160808T-252Y-CA | 2500         | 25          | 100                 | 1.00            | 100           |

**Note:** When ordering, please specify tolerance code. Tolerance : Y $\pm$ 25%

- Operating temperature range—55°C~125°C(Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than 30°C

**Test Instruments:** Agilent E4991A Impedance / Material Analyzer

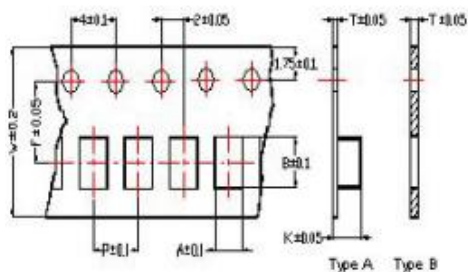
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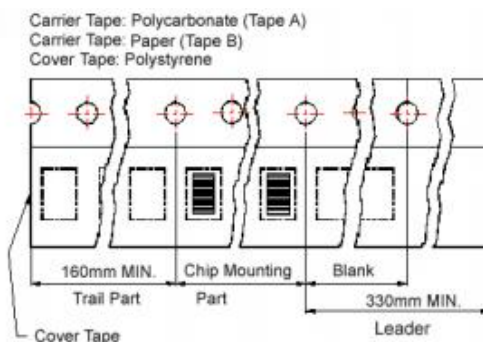
## SMD Multilayer Ferrite Chip Beads-HNBQ Series-CA

### Packaging Specifications

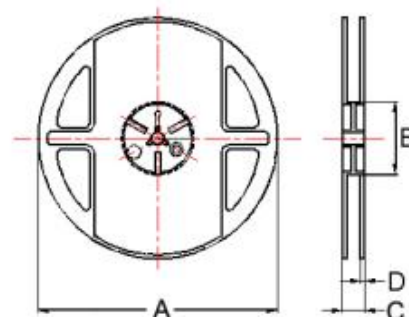
#### Tape Dimensions



#### Tape Material



#### Reel Dimensions



- ① : HSBY / HSBJ / HNB / HPB  
② : HSBY / HSBJ / HNB / HPB / HUPB / HF  
③ : HUPB  
④ : HSBK / HSBJ / HGB / HPB / HNB / HUPB / HVPB  
⑤ : HSBK / HGB / HPB / HUPB  
⑥ : HSBY / HSBK / HPB / HUPB

### Dimensions in mm

| TYPE    | Tape Dimensions |      |      |     |     |     |      |      | Reel Dimensions |    |    |   | Quantity<br>PCS/REEL |
|---------|-----------------|------|------|-----|-----|-----|------|------|-----------------|----|----|---|----------------------|
|         | A               | B    | T    | W   | P   | F   | K    | Tape | A               | B  | C  | D |                      |
| ①060303 | 0.37            | 0.67 | 0.42 | 8.0 | 2.0 | 3.5 | --   | B    | 178             | 60 | 10 | 2 | 15000                |
| ②100505 | 0.62            | 1.12 | 0.60 | 8.0 | 2.0 | 3.5 | --   | B    | 178             | 60 | 12 | 2 | 10000                |
| ③160805 | 1.05            | 1.85 | 0.60 | 8.0 | 2.0 | 3.5 | --   | B    | 178             | 60 | 12 | 2 | 10000                |
| ④160808 | 1.05            | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | --   | B    | 178             | 60 | 12 | 2 | 4000                 |
| ⑤201209 | 1.50            | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | --   | B    | 178             | 60 | 12 | 2 | 4000                 |
| ⑥321611 | 1.88            | 3.50 | 0.22 | 8.0 | 4.0 | 3.5 | 1.27 | A    | 178             | 60 | 12 | 2 | 3000                 |