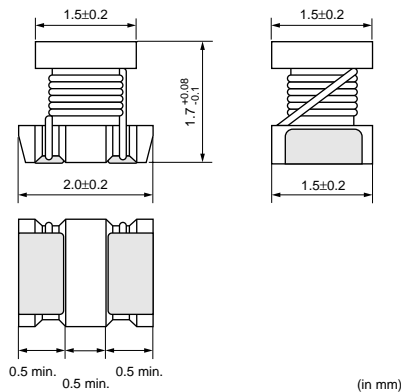


# Chip Inductor (Chip Coil) for High Frequency Vertical Wire Wound

## LQW2BH\_03 Series (0805 Size)

### ■ Dimensions



### ■ Packaging

| Code | Packaging           | Minimum Quantity |
|------|---------------------|------------------|
| L    | 180mm Embossed Tape | 2000             |
| K    | 330mm Embossed Tape | 7500             |

### ■ Rated Value (□: packaging code)

| Part Number    | Inductance  | Test Frequency | Rated Current | Max. of DC resistance | Q (min.) | Test Frequency | Self Resonance Frequency (min.) |
|----------------|-------------|----------------|---------------|-----------------------|----------|----------------|---------------------------------|
| LQW2BHN3N3D03□ | 3.3nH±0.5nH | 100MHz         | 910mA         | 0.05ohm               | 10       | 250MHz         | 6000MHz                         |
| LQW2BHN6N8D03□ | 6.8nH±0.5nH | 100MHz         | 680mA         | 0.11ohm               | 20       | 250MHz         | 5400MHz                         |
| LQW2BHN8N2D03□ | 8.2nH±0.5nH | 100MHz         | 630mA         | 0.12ohm               | 20       | 250MHz         | 3900MHz                         |
| LQW2BHN10NJ03□ | 10nH±5%     | 100MHz         | 1320mA        | 0.03ohm               | 30       | 250MHz         | 3300MHz                         |
| LQW2BHN12NJ03□ | 12nH±5%     | 100MHz         | 680mA         | 0.11ohm               | 30       | 250MHz         | 3200MHz                         |
| LQW2BHN15NJ03□ | 15nH±5%     | 100MHz         | 630mA         | 0.12ohm               | 30       | 250MHz         | 2700MHz                         |
| LQW2BHN18NJ03□ | 18nH±5%     | 100MHz         | 690mA         | 0.10ohm               | 30       | 250MHz         | 2600MHz                         |
| LQW2BHN22NJ03□ | 22nH±5%     | 100MHz         | 720mA         | 0.09ohm               | 30       | 250MHz         | 2100MHz                         |
| LQW2BHN27NJ03□ | 27nH±5%     | 100MHz         | 540mA         | 0.17ohm               | 40       | 250MHz         | 2300MHz                         |
| LQW2BHN33NG03□ | 33nH±2%     | 100MHz         | 570mA         | 0.15ohm               | 40       | 250MHz         | 1900MHz                         |
| LQW2BHN33NJ03□ | 33nH±5%     | 100MHz         | 570mA         | 0.15ohm               | 40       | 250MHz         | 1900MHz                         |
| LQW2BHN39NG03□ | 39nH±2%     | 100MHz         | 730mA         | 0.09ohm               | 40       | 250MHz         | 1700MHz                         |
| LQW2BHN39NJ03□ | 39nH±5%     | 100MHz         | 730mA         | 0.09ohm               | 40       | 250MHz         | 1700MHz                         |
| LQW2BHN47NG03□ | 47nH±2%     | 100MHz         | 450mA         | 0.23ohm               | 40       | 200MHz         | 1600MHz                         |
| LQW2BHN47NJ03□ | 47nH±5%     | 100MHz         | 450mA         | 0.23ohm               | 40       | 200MHz         | 1600MHz                         |
| LQW2BHN56NG03□ | 56nH±2%     | 100MHz         | 430mA         | 0.26ohm               | 40       | 200MHz         | 1500MHz                         |
| LQW2BHN56NJ03□ | 56nH±5%     | 100MHz         | 430mA         | 0.26ohm               | 40       | 200MHz         | 1500MHz                         |
| LQW2BHN68NG03□ | 68nH±2%     | 100MHz         | 460mA         | 0.23ohm               | 40       | 200MHz         | 1200MHz                         |
| LQW2BHN68NJ03□ | 68nH±5%     | 100MHz         | 460mA         | 0.23ohm               | 40       | 200MHz         | 1200MHz                         |
| LQW2BHN82NG03□ | 82nH±2%     | 100MHz         | 320mA         | 0.42ohm               | 40       | 150MHz         | 1100MHz                         |
| LQW2BHN82NJ03□ | 82nH±5%     | 100MHz         | 320mA         | 0.42ohm               | 40       | 150MHz         | 1100MHz                         |
| LQW2BHNR10G03□ | 100nH±2%    | 100MHz         | 270mA         | 0.55ohm               | 35       | 150MHz         | 900MHz                          |
| LQW2BHNR10J03□ | 100nH±5%    | 100MHz         | 350mA         | 0.38ohm               | 40       | 150MHz         | 900MHz                          |
| LQW2BHNR12G03□ | 120nH±2%    | 100MHz         | 320mA         | 0.40ohm               | 40       | 150MHz         | 750MHz                          |


Operating Temperature Range: -40°C to +85°C

Continued on the following page.

● This data sheet is applied for CHIP INDUCTORS (CHIP COILS) used for General Electronics equipment for your design.

### ⚠ Note:

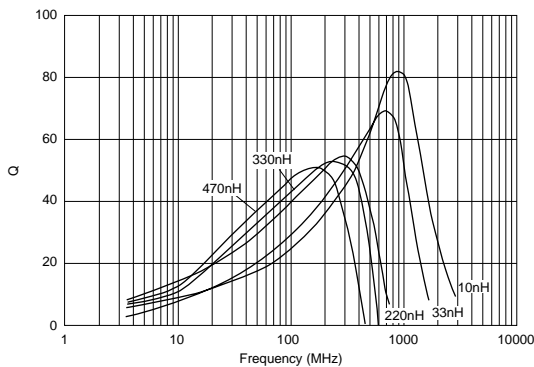
- This datasheet is downloaded from the website of Murata Manufacturing co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

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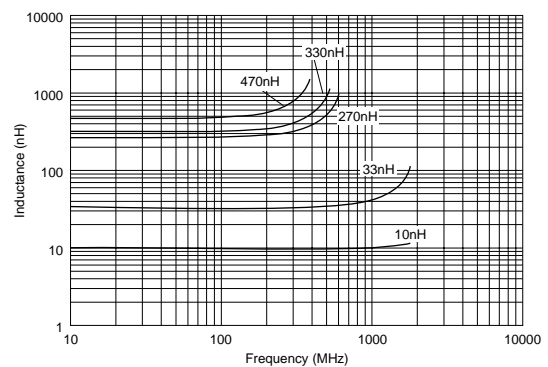
| Part Number    | Inductance | Test Frequency | Rated Current | Max. of DC resistance | Q (min.) | Test Frequency | Self Resonance Frequency (min.) |
|----------------|------------|----------------|---------------|-----------------------|----------|----------------|---------------------------------|
| LQW2BHNR12J03□ | 120nH±5%   | 100MHz         | 320mA         | 0.40ohm               | 40       | 150MHz         | 750MHz                          |
| LQW2BHNR15G03□ | 150nH±2%   | 100MHz         | 260mA         | 0.68ohm               | 30       | 150MHz         | 350MHz                          |
| LQW2BHNR15J03□ | 150nH±5%   | 100MHz         | 390mA         | 0.47ohm               | 30       | 150MHz         | 350MHz                          |
| LQW2BHNR18G03□ | 180nH±2%   | 100MHz         | 250mA         | 0.71ohm               | 35       | 100MHz         | 700MHz                          |
| LQW2BHNR18J03□ | 180nH±5%   | 100MHz         | 250mA         | 0.71ohm               | 35       | 100MHz         | 700MHz                          |
| LQW2BHNR22G03□ | 220nH±2%   | 100MHz         | 240mA         | 0.70ohm               | 35       | 100MHz         | 500MHz                          |
| LQW2BHNR22J03□ | 220nH±5%   | 100MHz         | 240mA         | 0.70ohm               | 35       | 100MHz         | 500MHz                          |
| LQW2BHNR27J03□ | 270nH±5%   | 10MHz          | 190mA         | 2.00ohm               | 15       | 25.2MHz        | 550MHz                          |
| LQW2BHNR27K03□ | 270nH±10%  | 10MHz          | 190mA         | 2.00ohm               | 15       | 25.2MHz        | 550MHz                          |
| LQW2BHNR33J03□ | 330nH±5%   | 10MHz          | 180mA         | 2.20ohm               | 15       | 25.2MHz        | 500MHz                          |
| LQW2BHNR33K03□ | 330nH±10%  | 10MHz          | 180mA         | 2.20ohm               | 15       | 25.2MHz        | 500MHz                          |
| LQW2BHNR39J03□ | 390nH±5%   | 10MHz          | 170mA         | 2.50ohm               | 15       | 25.2MHz        | 400MHz                          |
| LQW2BHNR39K03□ | 390nH±10%  | 10MHz          | 170mA         | 2.50ohm               | 15       | 25.2MHz        | 400MHz                          |
| LQW2BHNR47J03□ | 470nH±5%   | 10MHz          | 160mA         | 2.80ohm               | 15       | 25.2MHz        | 350MHz                          |
| LQW2BHNR47K03□ | 470nH±10%  | 10MHz          | 160mA         | 2.80ohm               | 15       | 25.2MHz        | 350MHz                          |

Operating Temperature Range: -40°C to +85°C

### ■ Q-Frequency Characteristics (Typ.)



### ■ Inductance-Frequency Characteristics (Typ.)



### ■ ⚠ Caution/Notice

#### ⚠ Caution (Rating)

Do not use products beyond the rated current as this may create excessive heat.

#### Notice

Solderability of Tin plating termination chip might be deteriorated when low temperature soldering profile where peak solder temperature is below the Tin melting point is used. Please confirm the solderability of Tin plating termination chip before use.

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