

BWCT Series



Due to accurate wire winding technology, these chip inductors are designed for filtering, impedance matching, resonance and choke circuits for RF designer. Both standard series custom designs are available.

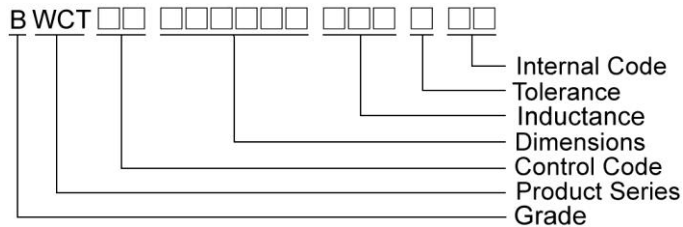
Features

- RoHS compliant.
- Ceramic body and wire wound construction provide highest SRFs
- Exceptional Q values even at high frequencies
- Highest possible SRFs as well as excellent Q values
- The non-magnetic coil form assures utmost thermal stability, predictability and batch consistency

Applications

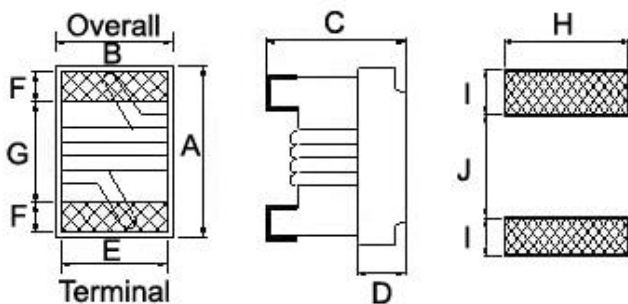
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

Product Identification



Shape and Dimensions/ Recommended Pattern

BWCT00231711



Dimensions

| | | A Max | B Max | C Max | D | E | F | G | H | I | J |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BWCT00231711 | inch | 0.093 | 0.068 | 0.039 | 0.020 | 0.050 | 0.020 | 0.040 | 0.070 | 0.040 | 0.030 |
| | mm | 2.35 | 1.73 | 1.10 | 0.51 | 1.27 | 0.51 | 1.02 | 1.78 | 1.02 | 0.76 |

SMD Wire Wound Ceramic Chip Inductors – BWCT Series

Electrical Characteristics

| Part Number | Inductance (nH) | Tolerance (±%) | Test Frequency (MHz) | Q Min | Test Frequency (MHz) | SRF (MHz) Min | RDC (Ω) Max | Irms (mA) Max | Color |
|--------------------|-----------------|----------------|----------------------|-------|----------------------|---------------|-------------|---------------|--------|
| BWCT002317111N8□00 | 1.8 | 10 | 250 | 55 | 1500 | 9400 | 0.03 | 800 | Black |
| BWCT002317113N9□00 | 3.9 | 10 | 250 | 50 | 1000 | 6100 | 0.06 | 800 | Brown |
| BWCT002317114N7□00 | 4.7 | 10 / 5 | 250 | 50 | 1000 | 5500 | 0.06 | 800 | Red |
| BWCT002317115N1□00 | 5.1 | 10 / 5 | 250 | 50 | 1000 | 5500 | 0.06 | 800 | - |
| BWCT002317116N8□00 | 6.8 | 10 / 5 | 250 | 50 | 1000 | 5500 | 0.08 | 800 | Orange |
| BWCT002317118N2□00 | 8.2 | 10 / 5 | 250 | 50 | 1000 | 4800 | 0.08 | 800 | Yellow |
| BWCT0023171110N□00 | 10 | 10 / 5 / 2 | 250 | 55 | 750 | 3300 | 0.08 | 800 | Green |
| BWCT0023171112N□00 | 12 | 10 / 5 / 2 | 250 | 55 | 750 | 3800 | 0.10 | 800 | Blue |
| BWCT0023171115N□00 | 15 | 10 / 5 / 2 | 250 | 50 | 500 | 2950 | 0.10 | 800 | Violet |
| BWCT0023171118N□00 | 18 | 10 / 5 / 2 | 250 | 50 | 500 | 3100 | 0.13 | 800 | Gray |
| BWCT0023171122N□00 | 22 | 10 / 5 / 2 | 250 | 50 | 500 | 2900 | 0.15 | 800 | White |
| BWCT0023171127N□00 | 27 | 10 / 5 / 2 | 250 | 50 | 500 | 2450 | 0.23 | 600 | Black |
| BWCT0023171133N□00 | 33 | 10 / 5 / 2 | 250 | 55 | 500 | 2350 | 0.28 | 600 | Brown |
| BWCT0023171139N□00 | 39 | 10 / 5 / 2 | 250 | 55 | 500 | 2200 | 0.33 | 600 | Red |
| BWCT0023171147N□00 | 47 | 10 / 5 / 2 | 200 | 50 | 500 | 2000 | 0.39 | 600 | Orange |
| BWCT0023171156N□00 | 56 | 10 / 5 / 2 | 200 | 50 | 500 | 1850 | 0.39 | 500 | Yellow |
| BWCT0023171168N□00 | 68 | 10 / 5 / 2 | 200 | 50 | 500 | 1500 | 0.40 | 500 | Green |
| BWCT0023171182N□00 | 82 | 10 / 5 / 2 | 150 | 50 | 500 | 1500 | 0.44 | 500 | Blue |
| BWCT00231711R10□00 | 100 | 10 / 5 / 2 | 150 | 50 | 500 | 1200 | 0.64 | 400 | Violet |
| BWCT00231711R12□00 | 120 | 10 / 5 / 2 | 150 | 40 | 250 | 1150 | 0.68 | 300 | Gray |
| BWCT00231711R15□00 | 150 | 10 / 5 / 2 | 150 | 40 | 250 | 1050 | 0.80 | 300 | White |
| BWCT00231711R18□00 | 180 | 10 / 5 / 2 | 150 | 40 | 250 | 950 | 0.90 | 300 | Black |
| BWCT00231711R22□00 | 220 | 10 / 5 / 2 | 150 | 40 | 250 | 900 | 0.98 | 300 | Brown |
| BWCT00231711R27□00 | 270 | 10 / 5 / 2 | 150 | 40 | 250 | 850 | 1.30 | 300 | Red |
| BWCT00231711R33□00 | 330 | 10 / 5 / 2 | 100 | 40 | 250 | 800 | 1.45 | 300 | Orange |
| BWCT00231711R39□00 | 390 | 10 / 5 / 2 | 100 | 35 | 250 | 700 | 1.60 | 300 | Yellow |
| BWCT00231711R47□00 | 470 | 10 / 5 / 2 | 50 | 25 | 100 | 600 | 1.80 | 300 | Green |
| BWCT00231711R56□00 | 560 | 10 / 5 / 2 | 25 | 18 | 50 | 550 | 1.90 | 300 | Blue |
| BWCT00231711R62□00 | 620 | 10 / 5 / 2 | 25 | 18 | 50 | 450 | 2.00 | 300 | Violet |
| BWCT00231711R68□00 | 680 | 10 / 5 / 2 | 25 | 18 | 50 | 420 | 2.10 | 300 | Gray |
| BWCT00231711R75□00 | 750 | 10 / 5 / 2 | 25 | 18 | 50 | 400 | 2.20 | 300 | White |
| BWCT00231711R82□00 | 820 | 10 / 5 / 2 | 25 | 18 | 50 | 400 | 2.50 | 300 | Black |
| BWCT00231711R0□00 | 1000 | 10 / 5 | 25 | 17 | 50 | 330 | 3.10 | 300 | Brown |

Note: When ordering, please specify tolerance code. Tolerance : G=±2% , J=±5% , K=±10%

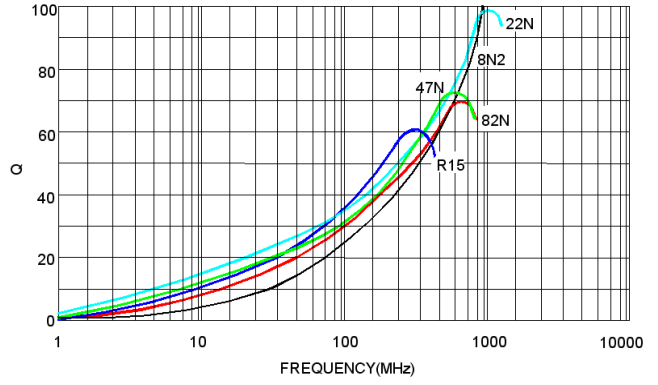
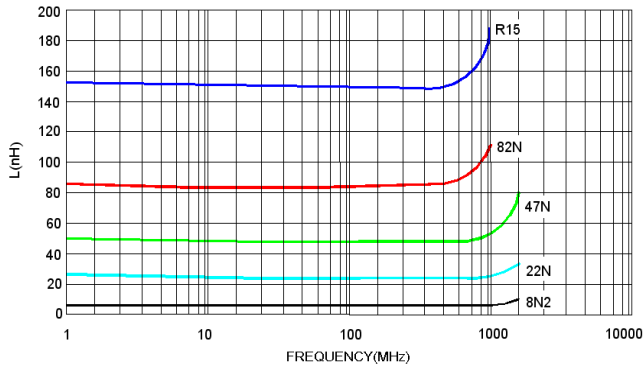
- Operating temperature range—40°C ~ 125°C (Including self - temperature rise)
- I rms for a 15°C temperature rise from 25°C ambient with current
- Measure Equipment :
 - L & Q : Agilent E4991A+Agilent HP16197A
 - SRF : Agilent/HP8753D/Agilent E4991A
 - RDC: HP4338B or Chroma 16502
 - I rms : HP4284A+HP42841A/HP4285A+HP42841A

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 prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

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Test Instruments : Agilent E4991A Material/Impedance Analyzer

BWCT00231711



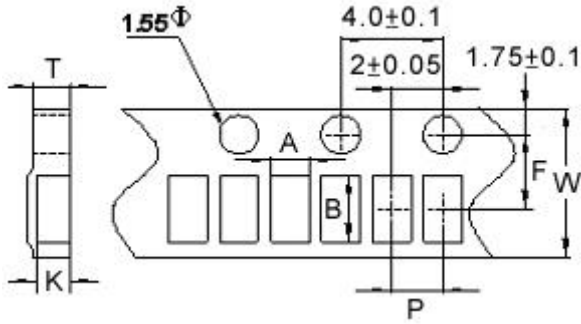
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Packaging Specifications

Tape Dimensions

Figure 1



Tape Material

Carrier Tape: Paper
Cover Tape: Polystyrene

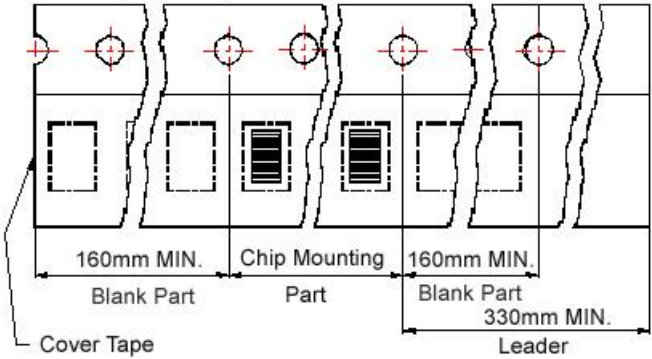
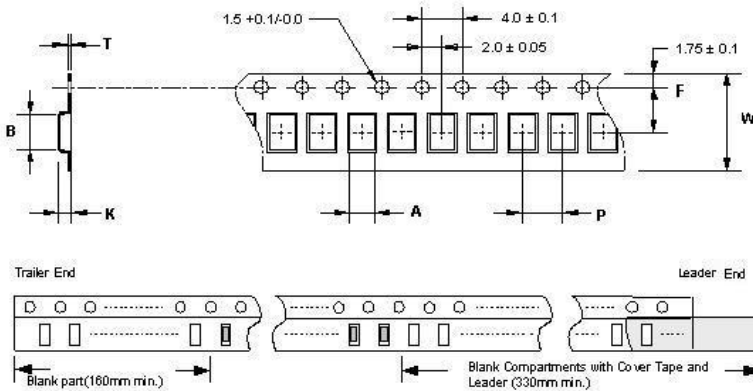
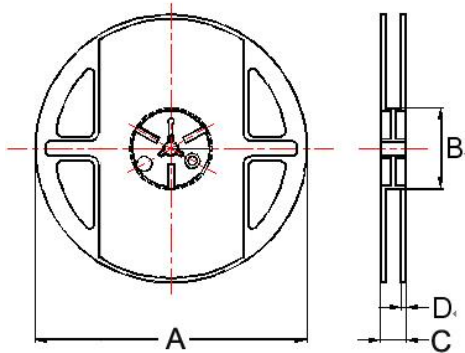


Figure 2



Reel Dimensions



Dimensions in mm

| TYPE | Fig. | Tape Dimensions | | | | | | | Reel Dimensions | | | | Quantity PCS / Reel |
|--------------|------|-----------------|------|------|---|---|-----|------|-----------------|----|----|-----|------------------------|
| | | A | B | T | W | P | F | K | A | B | C | D | |
| BWCT00231711 | 2 | 1.85 | 2.45 | 0.23 | 8 | 4 | 3.5 | 1.10 | 178 | 60 | 12 | 1.5 | 2000 |