



Chip Inductors – 0805HT Series (2012)

At just 0.035" high, these are one of our lowest profile surface mount inductors. Their wire wound ceramic design provides tight tolerances, exceptional Q and high SRF values.

Coilcraft **Designer's Kit C121** contains samples of all 5% inductance tolerance parts. To order, contact Coilcraft or visit <http://order.coilcraft.com> to purchase on-line.

| Part number ¹ | Inductance ² (nH) | Percent tolerance ³ | Q min ⁴ | SRF min ⁵ (MHz) | DCR max ⁶ (Ohms) | Irms ⁷ (mA) | Color Code |
|--------------------------|---------------------------------|--------------------------------|--------------------|-------------------------------|--------------------------------|---------------------------|------------|
| 0805HT-1N8T_B_ | 1.8 @ 250 MHz | 5 | 55 @ 1500 MHz | 9400 | 0.03 | 800 | Black |
| 0805HT-3N9T_B_ | 3.9 @ 250 MHz | 5 | 50 @ 1000 MHz | 6100 | 0.055 | 800 | Brown |
| 0805HT-4N7T_B_ | 4.7 @ 250 MHz | 5 | 50 @ 1000 MHz | 5500 | 0.06 | 800 | Red |
| 0805HT-6N8T_B_ | 6.8 @ 250 MHz | 5 | 50 @ 1000 MHz | 4800 | 0.08 | 800 | Orange |
| 0805HT-8N2T_B_ | 8.2 @ 250 MHz | 5 | 50 @ 1000 MHz | 4800 | 0.08 | 800 | Yellow |
| 0805HT-10NT_B_ | 10 @ 250 MHz | 5,2 | 55 @ 750 MHz | 3300 | 0.08 | 800 | Green |
| 0805HT-12NT_B_ | 12 @ 250 MHz | 5,2 | 55 @ 750 MHz | 3800 | 0.10 | 800 | Blue |
| 0805HT-15NT_B_ | 15 @ 250 MHz | 5,2 | 50 @ 500 MHz | 2950 | 0.10 | 800 | Violet |
| 0805HT-18NT_B_ | 18 @ 250 MHz | 5,2 | 50 @ 500 MHz | 3100 | 0.13 | 800 | Gray |
| 0805HT-22NT_B_ | 22 @ 250 MHz | 5,2 | 50 @ 500 MHz | 2900 | 0.15 | 800 | White |
| 0805HT-27NT_B_ | 27 @ 250 MHz | 5,2 | 50 @ 500 MHz | 2450 | 0.19 | 700 | Black |
| 0805HT-33NT_B_ | 33 @ 250 MHz | 5,2 | 55 @ 500 MHz | 2350 | 0.19 | 600 | Brown |
| 0805HT-39NT_B_ | 39 @ 250 MHz | 5,2,1 | 55 @ 500 MHz | 2200 | 0.27 | 600 | Red |
| 0805HT-47NT_B_ | 47 @ 200 MHz | 5,2,1 | 50 @ 500 MHz | 2000 | 0.30 | 600 | Orange |
| 0805HT-56NT_B_ | 56 @ 200 MHz | 5,2,1 | 50 @ 500 MHz | 1850 | 0.39 | 500 | Yellow |
| 0805HT-68NT_B_ | 68 @ 200 MHz | 5,2,1 | 50 @ 500 MHz | 1500 | 0.40 | 500 | Green |
| 0805HT-82NT_B_ | 82 @ 150 MHz | 5,2,1 | 50 @ 500 MHz | 1500 | 0.44 | 500 | Blue |
| 0805HT-R10T_B_ | 100 @ 150 MHz | 5,2 | 50 @ 500 MHz | 1200 | 0.64 | 400 | Violet |
| 0805HT-R12T_B_ | 120 @ 150 MHz | 5,2 | 40 @ 250 MHz | 1150 | 0.68 | 300 | Gray |
| 0805HT-R15T_B_ | 150 @ 150 MHz | 5,2 | 40 @ 250 MHz | 1050 | 0.80 | 300 | White |
| 0805HT-R18T_B_ | 180 @ 150 MHz | 5,2 | 40 @ 250 MHz | 830 | 0.86 | 300 | Black |
| 0805HT-R22T_B_ | 220 @ 150 MHz | 5,2 | 39 @ 150 MHz | 820 | 1.29 | 200 | Orange |
| 0805HT-R27T_B_ | 270 @ 150 MHz | 5,2 | 33 @ 150 MHz | 790 | 1.40 | 200 | Yellow |
| 0805HT-R33T_B_ | 330 @ 150 MHz | 5,2 | 32 @ 150 MHz | 730 | 1.93 | 200 | Green |
| 0805HT-R39T_B_ | 390 @ 100 MHz | 5,2 | 30 @ 150 MHz | 675 | 2.80 | 200 | Blue |
| 0805HT-R47T_B_ | 470 @ 100 MHz | 5,2 | 30 @ 150 MHz | 610 | 3.10 | 200 | Violet |
| 0805HT-R50T_B_ | 500 @ 50 MHz | 5,2 | 20 @ 50 MHz | 585 | 3.20 | 200 | Gray |

1. When ordering, please specify **tolerance** and **packaging** codes:

0805HT-R22T**GBC**

Tolerance: F = 1% G = 2% J = 5%

(Table shows stock tolerances in bold.)

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

2. Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.

3. Tolerances in bold are stocked for immediate shipment.

4. Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture and on an Agilent/HP 8753D with a Coilcraft SMD-D test fixture.

5. SRF measured using an Agilent/HP 8720D network analyzer and a Coilcraft SMD-D test fixture.

6. DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.

7. Average current for a 15°C rise above 25°C ambient.

8. Operating temperature range -40°C to +125°C.

9. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX **TEST FIXTURES**

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Specifications subject to change without notice.

Please check our website for latest information.

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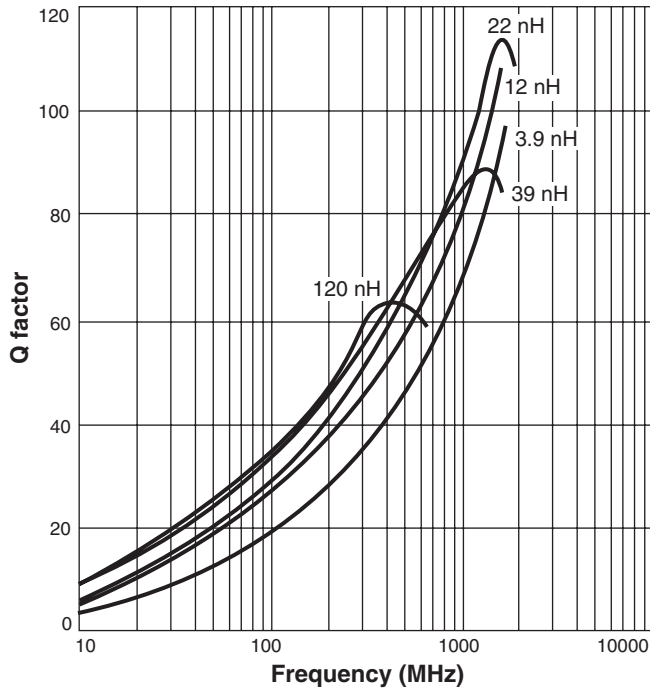
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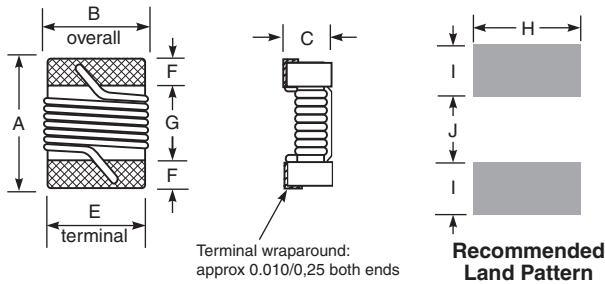
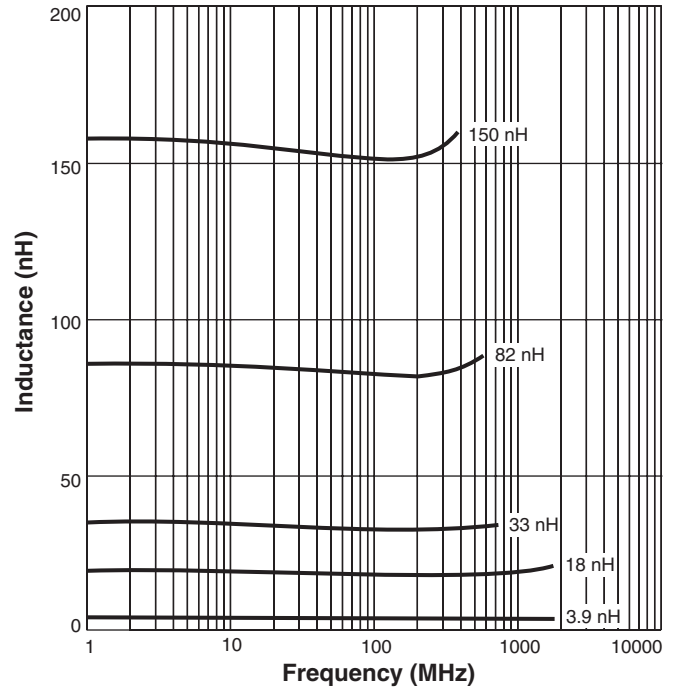
0805HT Series (2012)

Typical Q vs Frequency



S-Parameter files
ON OUR WEB SITE OR CD
SPICE models
ON OUR WEB SITE OR CD

Typical L vs Frequency



| A max | B max | C max | E | F | G | H | I | J |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.085 | 0.060 | 0.035 | 0.050 | 0.017 | 0.045 | 0.070 | 0.040 | 0.030 |
| 2,16 | 1,52 | 0,89 | 1,27 | 0,43 | 1,14 | 1,78 | 1,02 | 0,76 |

Weight: 6.0 – 6.9 mg
Terminations: Platinum/palladium/silver
Tape and reel: 2000/7" reel; 7500/13" reel 8 mm tape width
 For packaging data see Tape and Reel Specifications section.



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 Please check our website for latest information. Document 168-2 Revised 01/24/05

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