

Chip Inductors – 0805HS Series (2012)

Ceramic body and wire wound construction provide highest SRFs available in 0805 size. These ultra-compact inductors provide exceptional Q values, even at high frequencies.

Free evaluation samples are available by contacting Coilcraft or ordering them on-line at www.coilcraft.com.

| 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 |
|--------------------------|---------------------------------|--------------------------------|--------------------|-------------------------------|--------------------------------|---------------------------|------------|
| 0805HS-030T_B_ | 3.3 @ 250 MHz | 5 | 50 @ 1500 MHz | 7900 | 0.08 | 600 | Black |
| 0805HS-060T_B_ | 6.8 @ 250 MHz | 5 | 50 @ 1000 MHz | 5500 | 0.11 | 600 | Brown |
| 0805HS-080T_B_ | 8.2 @ 250 MHz | 5 | 50 @ 1000 MHz | 4700 | 0.12 | 600 | Red |
| 0805HS-120T_B_ | 12 @ 250 MHz | 5 | 50 @ 500 MHz | 4000 | 0.15 | 600 | Orange |
| 0805HS-150T_B_ | 15 @ 250 MHz | 5 | 50 @ 500 MHz | 3400 | 0.17 | 600 | Yellow |
| 0805HS-180T_B_ | 18 @ 250 MHz | 5 | 50 @ 500 MHz | 3300 | 0.20 | 600 | Green |
| 0805HS-220T_B_ | 22 @ 250 MHz | 5,2 | 55 @ 500 MHz | 2600 | 0.22 | 500 | Blue |
| 0805HS-270T_B_ | 27 @ 250 MHz | 5,2 | 55 @ 500 MHz | 2500 | 0.25 | 500 | Violet |
| 0805HS-330T_B_ | 33 @ 250 MHz | 5,2 | 60 @ 500 MHz | 2050 | 0.27 | 500 | Gray |
| 0805HS-390T_B_ | 39 @ 250 MHz | 5,2 | 60 @ 250 MHz | 2000 | 0.29 | 500 | White |
| 0805HS-470T_B_ | 47 @ 200 MHz | 5,2 | 60 @ 500 MHz | 1650 | 0.31 | 500 | Black |
| 0805HS-560T_B_ | 56 @ 200 MHz | 5,2,1 | 60 @ 500 MHz | 1550 | 0.34 | 500 | Brown |
| 0805HS-680T_B_ | 68 @ 200 MHz | 5,2,1 | 60 @ 500 MHz | 1450 | 0.38 | 500 | Red |
| 0805HS-820T_B_ | 82 @ 150 MHz | 5,2,1 | 65 @ 500 MHz | 1300 | 0.42 | 400 | Orange |
| 0805HS-101T_B_ | 100 @ 150 MHz | 5,2,1 | 65 @ 500 MHz | 1200 | 0.46 | 400 | Yellow |
| 0805HS-121T_B_ | 120 @ 150 MHz | 5,2,1 | 50 @ 250 MHz | 1100 | 0.51 | 400 | Green |
| 0805HS-151T_B_ | 150 @ 100 MHz | 5,2,1 | 50 @ 250 MHz | 920 | 0.56 | 400 | Blue |
| 0805HS-181T_B_ | 180 @ 100 MHz | 5,2,1 | 50 @ 250 MHz | 870 | 0.64 | 400 | Violet |
| 0805HS-221T_B_ | 220 @ 100 MHz | 5,2 | 50 @ 250 MHz | 850 | 0.70 | 400 | Gray |

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

0805HS-221T **J B C**

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 (7500 parts per full reel).

- Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
 - Tolerances in bold are stocked for immediate shipment.
 - Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
 - SRF measured using an Agilent/HP 8720D network analyzer and a Coilcraft SMD-D test fixture.
 - DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.
 - Average current for a 15°C rise above 25°C ambient.
 - Operating temperature range –40°C to +125°C.
 - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.

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

Coilcraft[®]

Specifications subject to change without notice.
Please check our website for latest information.

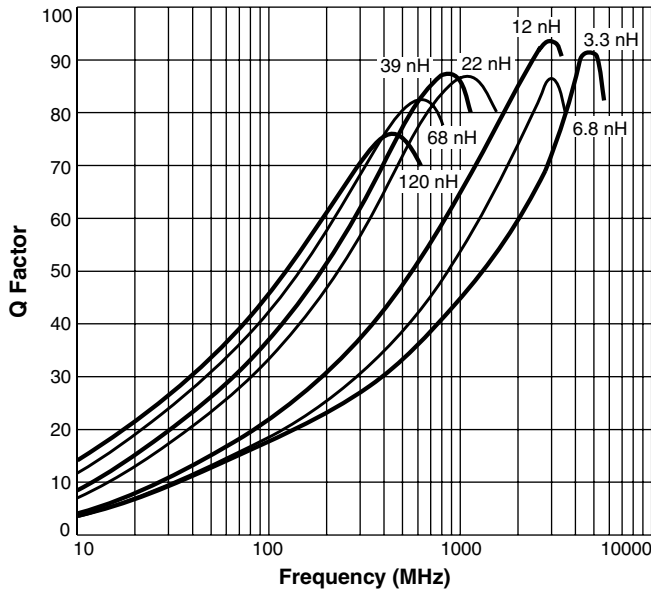
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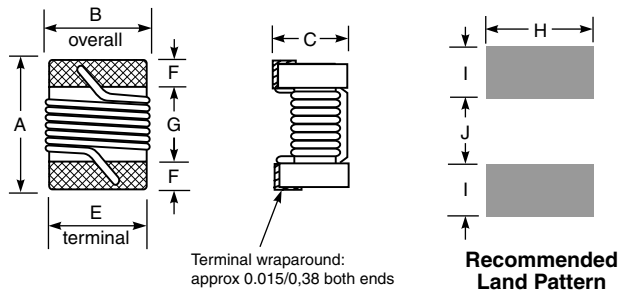
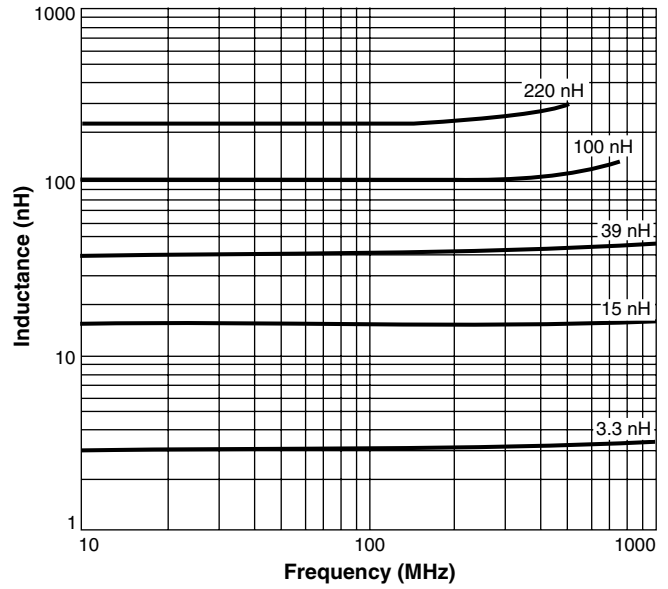
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0805HS Series (2012)

Typical Q vs Frequency



Typical L vs Frequency



| A max | B max | C max | E | F | G | H | I | J |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.085 | 0.060 | 0.057 | 0.050 | 0.020 | 0.040 | 0.070 | 0.040 | 0.030 |
| 2,16 | 1,52 | 1,45 | 1,27 | 0,51 | 1,02 | 1,78 | 1,02 | 0,76 |

Weight: 9.8 – 10.9 mg
Terminations: Silver-palladium-platinum
Tape and reel: 2000/7" reel; 7500/13" reel 8 mm tape width
 For packaging data see Tape and Reel Specifications section.

S-Parameter files
ON OUR WEB SITE OR CD
SPICE models
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 Please check our website for latest information. Document 159-2 Revised 12/28/04

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