



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

**Coilcraft**<sup>®</sup>

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

Document 168-1 Revised 12/14/03

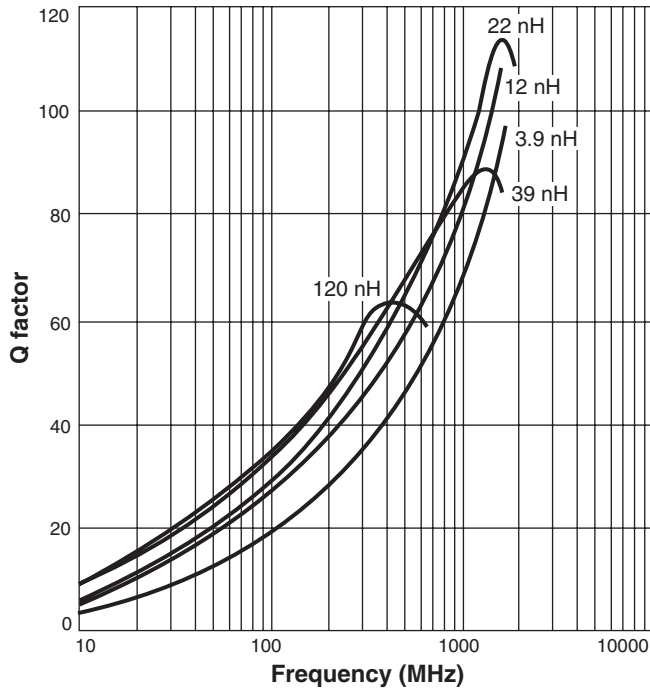
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



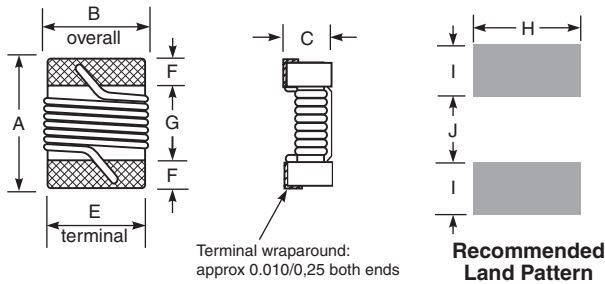
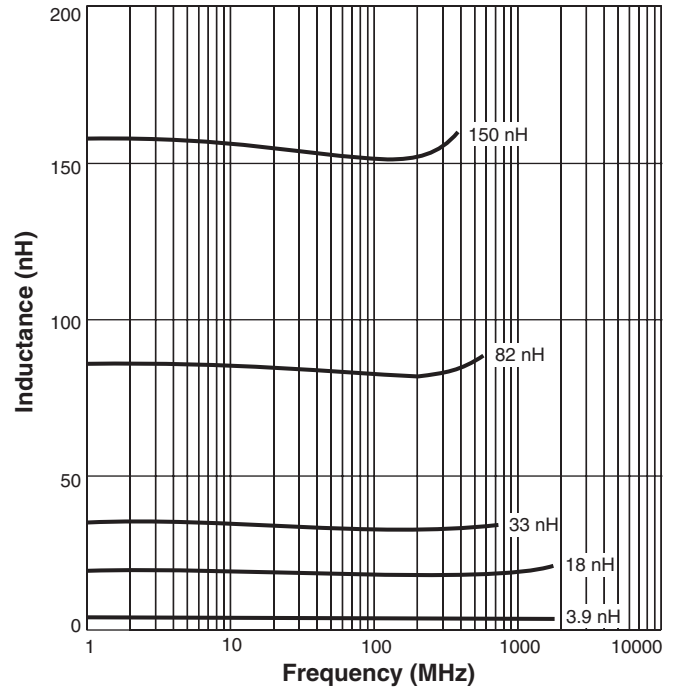
# 0805HT Series (2012)

## 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.



Specifications subject to change without notice.  
 Please check our website for latest information. Document 168-2 Revised 12/14/03

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
 E-mail info@coilcraft.com Web http://www.coilcraft.com