



# 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.

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 max <sup>7</sup> (mA)	Color code
0805HS-030T_B_	3.3 @ 250 MHz	20,10, <b>5</b>	50 @ 1500 MHz	7900	0.08	600	Black
0805HS-060T_B_	6.8 @ 250 MHz	20,10, <b>5</b>	50 @ 1000 MHz	5500	0.11	600	Brown
0805HS-080T_B_	8.2 @ 250 MHz	20,10, <b>5</b>	50 @ 1000 MHz	4700	0.12	600	Red
0805HS-120T_B_	12 @ 250 MHz	20,10, <b>5</b>	50 @ 500 MHz	4000	0.15	600	Orange
0805HS-150T_B_	15 @ 250 MHz	20,10, <b>5</b>	50 @ 500 MHz	3400	0.17	600	Yellow
0805HS-180T_B_	18 @ 250 MHz	20,10, <b>5</b>	50 @ 500 MHz	3300	0.20	600	Green
0805HS-220T_B_	22 @ 250 MHz	20,10, <b>5,2</b>	55 @ 500 MHz	2600	0.22	500	Blue
0805HS-270T_B_	27 @ 250 MHz	20,10, <b>5,2</b>	55 @ 500 MHz	2500	0.25	500	Violet
0805HS-330T_B_	33 @ 250 MHz	20,10, <b>5,2</b>	60 @ 500 MHz	2050	0.27	500	Gray
0805HS-390T_B_	39 @ 250 MHz	20,10, <b>5,2</b>	60 @ 500 MHz	2000	0.29	500	White
0805HS-470T_B_	47 @ 200 MHz	20,10, <b>5,2</b>	60 @ 500 MHz	1650	0.31	500	Black
0805HS-560T_B_	56 @ 200 MHz	10, <b>5,2,1</b>	60 @ 500 MHz	1550	0.34	500	Brown
0805HS-680T_B_	68 @ 200 MHz	10, <b>5,2,1</b>	60 @ 500 MHz	1450	0.38	500	Red
0805HS-820T_B_	82 @ 150 MHz	10, <b>5,2,1</b>	65 @ 500 MHz	1300	0.42	400	Orange
0805HS-101T_B_	100 @ 150 MHz	10, <b>5,2,1</b>	65 @ 500 MHz	1200	0.46	400	Yellow
0805HS-121T_B_	120 @ 150 MHz	10, <b>5,2,1</b>	50 @ 250 MHz	1100	0.51	400	Green
0805HS-151T_B_	150 @ 100 MHz	10, <b>5,2,1</b>	50 @ 250 MHz	920	0.56	400	Blue
0805HS-181T_B_	180 @ 100 MHz	10, <b>5,2,1</b>	50 @ 250 MHz	870	0.64	400	Violet
0805HS-221T_B_	220 @ 100 MHz	10, <b>5,2</b>	50 @ 250 MHz	850	0.70	400	Gray

1. Specify **tolerance, termination, and packaging** codes:

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

**Tolerance:** F = 1% G = 2% J = 5% K = 10% M = 20%  
(Table shows stock tolerances in bold.)

**Termination:** B = Ag/Pd/Pt/Pb L = Lead free Ag/Pd/Pt

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

B = Less than full reel. On 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 per full reel).

2. Inductance measured using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.

3. Tolerances in bold are stocked for immediate shipment.

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

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

6. DCR measured on Cambridge Technology micro-ohmmeter and 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. Document 159-1 Revised 11/20/02

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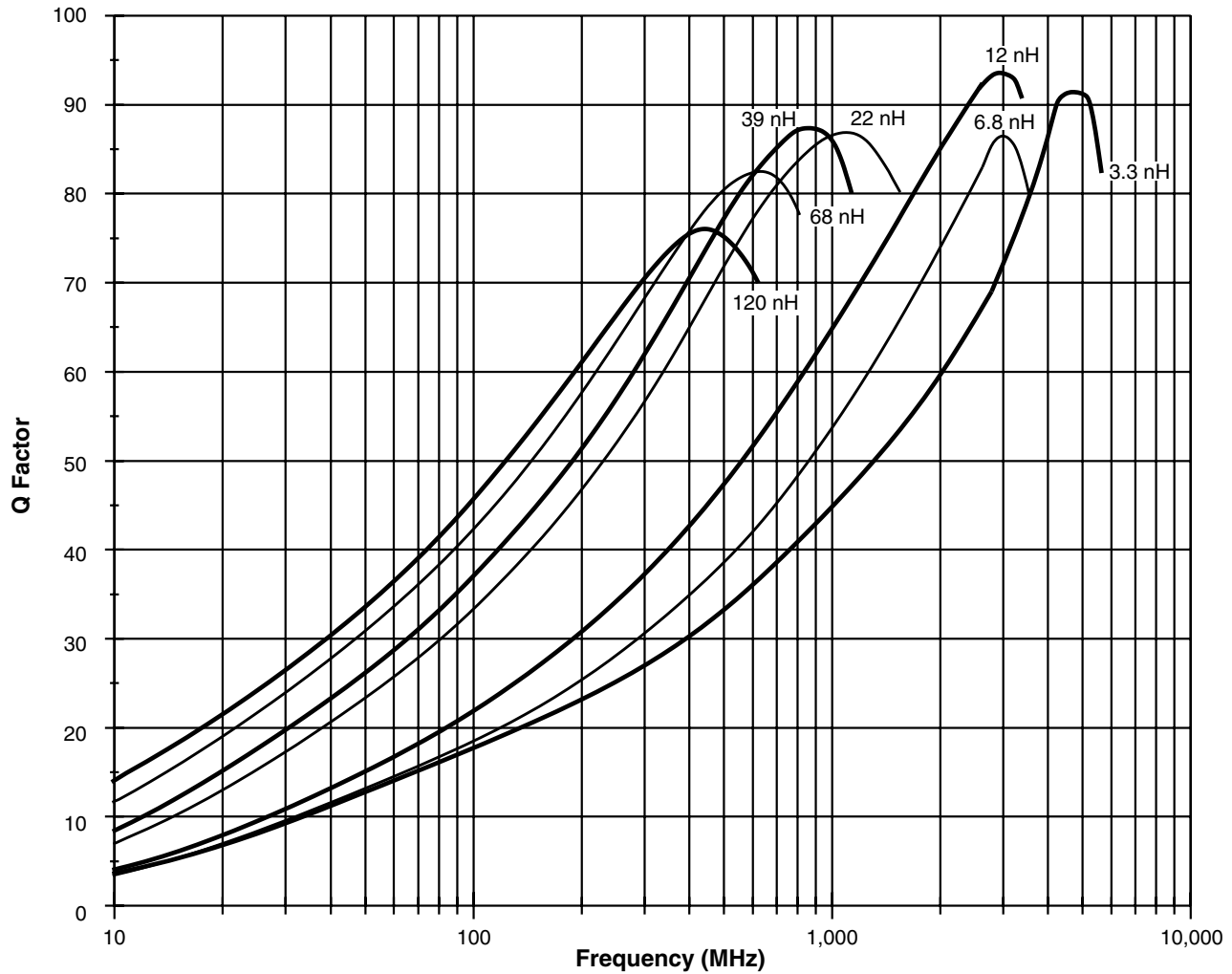
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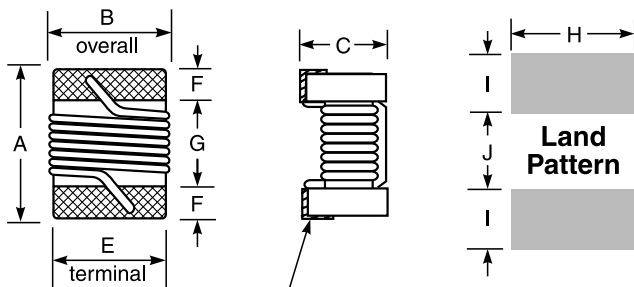
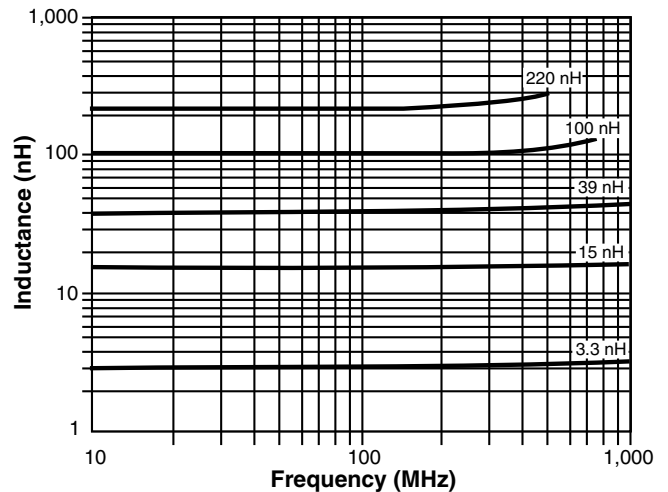
# 0805HS Series (2012)

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

## Typical Q vs Frequency



## Typical L vs Frequency



Terminal wraparound:  
approx 0.015/0.38 both ends

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

Parts/reel: 7" 2,000; 13" 7,500 Tape width: 8 mm  
For packaging data see Tape and Reel Specifications section.



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