Chip Inductors–0805CS Series (2012)

These ultra-compact inductors provide exceptional Q values, even at high frequencies. They have a ceramic body and wire wound construction to provide the highest SRFs available in 0805 size.

Coilcraft **Designer's Kit C103** contains samples of all 5% inductance tolerance parts. Kits with 2% tolerance are also available. To order, contact Coilcraft.

Part number[1]	Inductance[2] (nH)	Percent tolerance[3]	Q min[4]	SRF min[5] (MHz)	DCR max[6] (Ohms)	I_{DC} max[7] (mA)	Color code
0805CS-020X _ B_	2.8 @ 250 MHz	20,10,5	80 @ 1500 MHz	7900	.06	800	Gray
0805CS-3N0X _ B_	3.0 @ 250 MHz	20,10,5	65 @ 1500 MHz	7900	.06	800	White
0805CS-030X _ B_	3.3 @ 250 MHz	20,10,5	50 @ 1500 MHz	7900	.08	600	Black
0805CS-050X _ B_	5.6 @ 250 MHz	20,10,5	65 @ 1000 MHz	5500	.08	600	Orange
0805CS-060X _ B_	6.8 @ 250 MHz	20,10,5	50 @ 1000 MHz	5500	.11	600	Brown
0805CS-070X _ B_	7.5 @ 250 MHz	20,10,5	50 @ 1000 MHz	4500	.14	600	Green
0805CS-080X _ B_	8.2 @ 250 MHz	20,10,5,2	50 @ 1000 MHz	4700	.12	600	Red
0805CS-100X _ B_	10 @ 250 MHz	20,10,5,2	60 @ 500 MHz	4200	.10	600	Blue
0805CS-120X _ B_	12 @ 250 MHz	20,10,5,2	50 @ 500 MHz	4000	.15	600	Orange
0805CS-150X _ B_	15 @ 250 MHz	20,10,5,2	50 @ 500 MHz	3400	.17	600	Yellow
0805CS-180X _ B_	18 @ 250 MHz	20,10,5,2	50 @ 500 MHz	3300	.20	600	Green
0805CS-220X _ B_	22 @ 250 MHz	20,10,5,2	55 @ 500 MHz	2600	.22	500	Blue
0805CS-240X _ B_	24 @ 250 MHz	20,10,5,2	50 @ 500 MHz	2000	.22	500	Gray
0805CS-270X _ B_	27 @ 250 MHz	20,10,5,2	55 @ 500 MHz	2500	.25	500	Violet
0805CS-330X _ B_	33 @ 250 MHz	20,10,5,2,1	60 @ 500 MHz	2050	.27	500	Gray
0805CS-360X _ B_	36 @ 250 MHz	20,10,5,2,1	55 @ 500 MHz	1700	.27	500	Orange
0805CS-390X _ B_	39 @ 250 MHz	20,10,5,2,1	60 @ 500 MHz	2000	.29	500	White
0805CS-430X _ B_	43 @ 200 MHz	20,10,5,2,1	60 @ 500 MHz	1650	.34	500	Yellow
0805CS-470X _ B_	47 @ 200 MHz	20,10,5,2,1	60 @ 500 MHz	1650	.31	500	Black
0805CS-560X _ B_	56 @ 200 MHz	10,5,2,1	60 @ 500 MHz	1550	.34	500	Brown
0805CS-680X _ B_	68 @ 200 MHz	10,5,2,1	60 @ 500 MHz	1450	.38	500	Red
0805CS-820X _ B_	82 @ 150 MHz	10,5,2,1	65 @ 500 MHz	1300	.42	400	Orange
0805CS-910X _ B_	91 @ 150 MHz	20,10,5,2,1	65 @ 500 MHz	1200	.48	400	Black
0805CS-101X _ B_	100 @150 MHz	10,5,2,1	65 @ 500 MHz	1200	.46	400	Yellow
0805CS-111X _ B_	110 @ 150 MHz	20,10,5,2	50 @ 250 MHz	1000	.48	400	Brown
0805CS-121X _ B_	120 @ 150 MHz	10,5,2,1	50 @ 250 MHz	1100	.51	400	Green
0805CS-151X _ B_	150 @ 100 MHz	10,5,2,1	50 @ 250 MHz	920	.56	400	Blue
0805CS-181X _ B_	180 @ 100 MHz	10,5,2,1	50 @ 250 MHz	870	.64	400	Violet
0805CS-221X _ B_	220 @ 100 MHz	10,5,2	50 @ 250 MHz	850	.70	400	Gray
0805CS-241X _ B_	240 @ 100 MHz	20,10,5,2	44 @ 250 MHz	690	1.0	350	Red
0805CS-271X _ B_	270 @ 100 MHz	10,5,2	48 @ 250 MHz	650	1.0	350	White
0805CS-331X _ B_	330 @ 100 MHz	10,5,2	48 @ 250 MHz	600	1.4	310	Black
0805CS-391X _ B_	390 @ 100 MHz	10,5,2	48 @ 250 MHz	560	1.5	290	Brown
0805CS-471X _ B_	470 @ 50 MHz	10,5,2	33 @ 100 MHz	375	1.76	250	Violet
0805CS-561X _ B_	560 @ 25 MHz	10,5,2	23 @ 50 MHz	340	1.90	230	Orange
0805CS-681X _ B_	680 @ 25 MHz	10,5,2	23 @ 50 MHz	188	2.20	190	Green
0805CS-821X _ B_	820 @ 25 MHz	10,5,2	23 @ 50 MHz	215	2.35	180	Blue

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

0805CS-821X_B_

Inductance tolerance code:
Table above shows stock tolerances in bold.
F= ±1%, **G**= ±2%, **J**= ±5%, **K**= ±10%, **M**= ±20%

Packaging code:
C = **7″ machine-ready reel** EIA RS-481 clear plastic tape. 2000 per reel.
B = **Less than full reel** Not machine-ready. The carrier tape may not be a single continuous length. To have a leader and trailer added ($25 charge), use code letter C instead.
D = **13″ machine-ready reel** EIA RS-481 clear plastic tape. Factory order only, not stocked. 7500 per reel.

2. Inductance measured using Coilcraft SMD-A fixture in Agilent/HP4286A 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/HP4291A with Agilent/HP16193 test fixture and on Agilent/HP8753D with Coilcraft SMD-D test fixture.
5. SRF measured using Agilent/HP8720D network analyzer and Coilcraft SMD-D test fixture.
6. DCR measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF858 test fixture.
7. For 15° C rise.
8. Operating temperature range –40° C to +125° C.
9. Electrical specifications at 25° C.
10. For environmental data, see "Product Specifications" page (Doc. 121).

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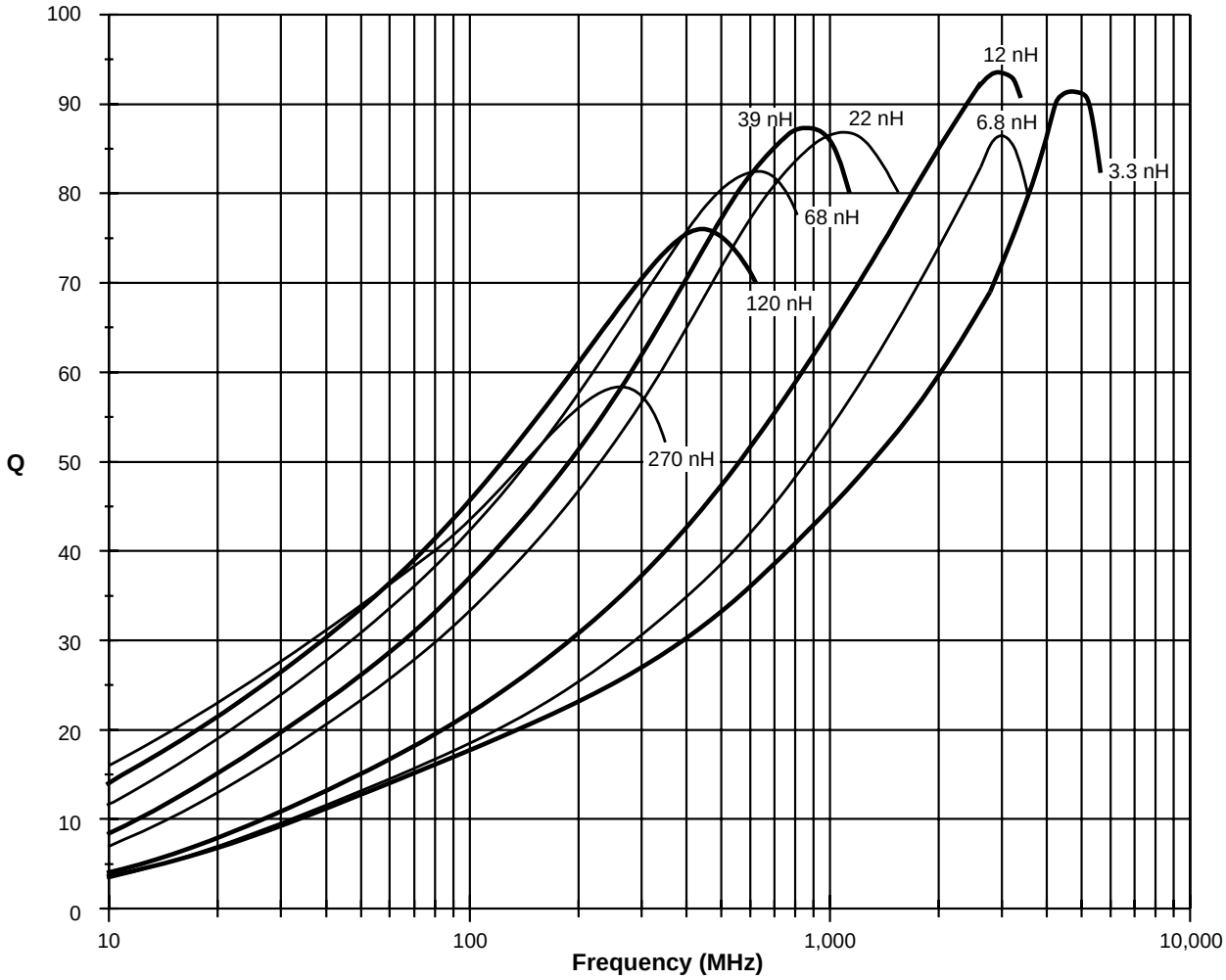
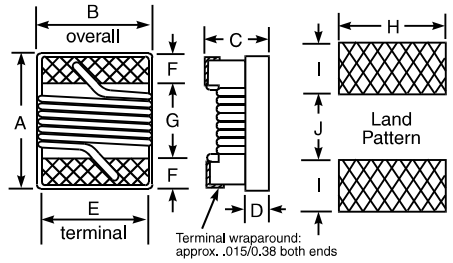
0805CS Series (2012)

S-Parameter files
ON OUR WEB SITE OR CD

PSpice models
SEE CATALOG, WEB SITE OR CD

TYPICAL Q vs FREQUENCY

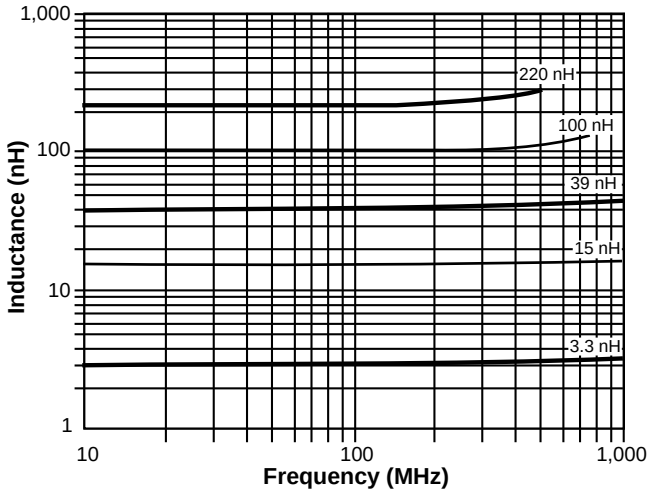




A Max.	B Max.	C Max.	D Ref.	E	F	G	H	I	J
.090	.068	.060	.020	.050	.020	.040	.070	.040	.030
2,29	1,73	1,52	0,51	1,27	0,51	1,02	1,78	1,02	0,76

Parts/reel: 7″ 2,000; 13″ 7,500 Tape width: 8 mm
For packaging data, see “Tape and Reel Specifications” (Document 173).

L vs FREQUENCY



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