

NEW!
Higher L values

Chip Inductors—0805CS Series (2012)

These ultra-compact inductors provide exceptional Q values, even at high frequencies. They have a ceramic body and wirewound 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)	R _{DC} Max ⁶ (Ohms)	I _{DC} Max ⁷ (mA)	Color Code
0805CS-030X_BC	3.3 @ 250 MHz	20,10,5	50 @ 1500 MHz	7900	.08	600	Black
0805CS-060X_BC	6.8 @ 250 MHz	20,10,5	50 @ 1000 MHz	5500	.11	600	Brown
0805CS-080X_BC	8.2 @ 250 MHz	20,10,5,2	50 @ 1000 MHz	4700	.12	600	Red
0805CS-120X_BC	12 @ 250 MHz	20,10,5,2	50 @ 500 MHz	4000	.15	600	Orange
0805CS-150X_BC	15 @ 250 MHz	20,10,5,2	50 @ 500 MHz	3400	.17	600	Yellow
0805CS-180X_BC	18 @ 250 MHz	20,10,5,2	50 @ 500 MHz	3300	.20	600	Green
0805CS-220X_BC	22 @ 250 MHz	20,10,5,2	55 @ 500 MHz	2600	.22	500	Blue
0805CS-270X_BC	27 @ 250 MHz	20,10,5,2	55 @ 500 MHz	2500	.25	500	Violet
0805CS-330X_BC	33 @ 250 MHz	20,10,5,2	60 @ 500 MHz	2050	.27	500	Gray
0805CS-390X_BC	39 @ 250 MHz	20,10,5,2	60 @ 500 MHz	2000	.29	500	White
0805CS-470X_BC	47 @ 200 MHz	20,10,5,2	60 @ 500 MHz	1650	.31	500	Black
0805CS-560X_BC	56 @ 200 MHz	10,5,2,1	60 @ 500 MHz	1550	.34	500	Brown
0805CS-680X_BC	68 @ 200 MHz	10,5,2,1	60 @ 500 MHz	1450	.38	500	Red
0805CS-820X_BC	82 @ 150 MHz	10,5,2,1	65 @ 500 MHz	1300	.42	400	Orange
0805CS-101X_BC	100 @ 150 MHz	10,5,2,1	65 @ 500 MHz	1200	.46	400	Yellow
0805CS-121X_BC	120 @ 150 MHz	10,5,2,1	50 @ 250 MHz	1100	.51	400	Green
0805CS-151X_BC	150 @ 100 MHz	10,5,2,1	50 @ 250 MHz	920	.56	400	Blue
0805CS-181X_BC	180 @ 100 MHz	10,5,2,1	50 @ 250 MHz	870	.64	400	Violet
0805CS-221X_BC	220 @ 100 MHz	10,5,2	50 @ 250 MHz	850	.70	400	Gray
0805CS-271X_BC	270 @ 100 MHz	10,5,2	48 @ 250 MHz	650	1.0	350	White
0805CS-331X_BC	330 @ 100 MHz	10,5,2	48 @ 250 MHz	600	1.4	310	Black
0805CS-391X_BC	390 @ 100 MHz	10,5,2	48 @ 250 MHz	560	1.5	290	Brown
0805CS-471X_BC	470 @ 50 MHz	10,5	33 @ 100 MHz	375	1.76	250	Violet
0805CS-561X_BC	560 @ 25 MHz	10,5	23 @ 50 MHz	340	1.90	230	Orange
0805CS-681X_BC	680 @ 25 MHz	10,5	23 @ 50 MHz	188	2.20	190	Green
0805CS-821X_BC	820 @ 25 MHz	10,5	23 @ 50 MHz	215	2.35	180	Blue

* For environmental data see "Product Specifications" section (Document 121).

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

0805CS-391X_BC

Packaging

C = EIA RS-481 clear tape and reel (standard).

For orders of less than a full reel, there is a \$25 per reel charge to make them machine-ready.

B = Bulk. In a carrier tape but without leader or trailer.

Inductance tolerance

F=1%, G=2%, J=5%, K=10%, M=20%

Table above shows stock tolerances in bold.

Other tolerances shown are available on special order.

2. Inductance measured using Coilcraft SMD-A fixture in 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 HP4291A with HP16193 test fixture and on HP8753D with Coilcraft SMD-D test fixture.

5. SRF measured using HP8753D network analyzer and Coilcraft SMD-D test fixture.

6. R_{DC} measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF858 test fixture.

7. For 15°C rise.

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

9. Electrical specifications at 25°C.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
DOC. 126 **TEST FIXTURES**

Coilcraft

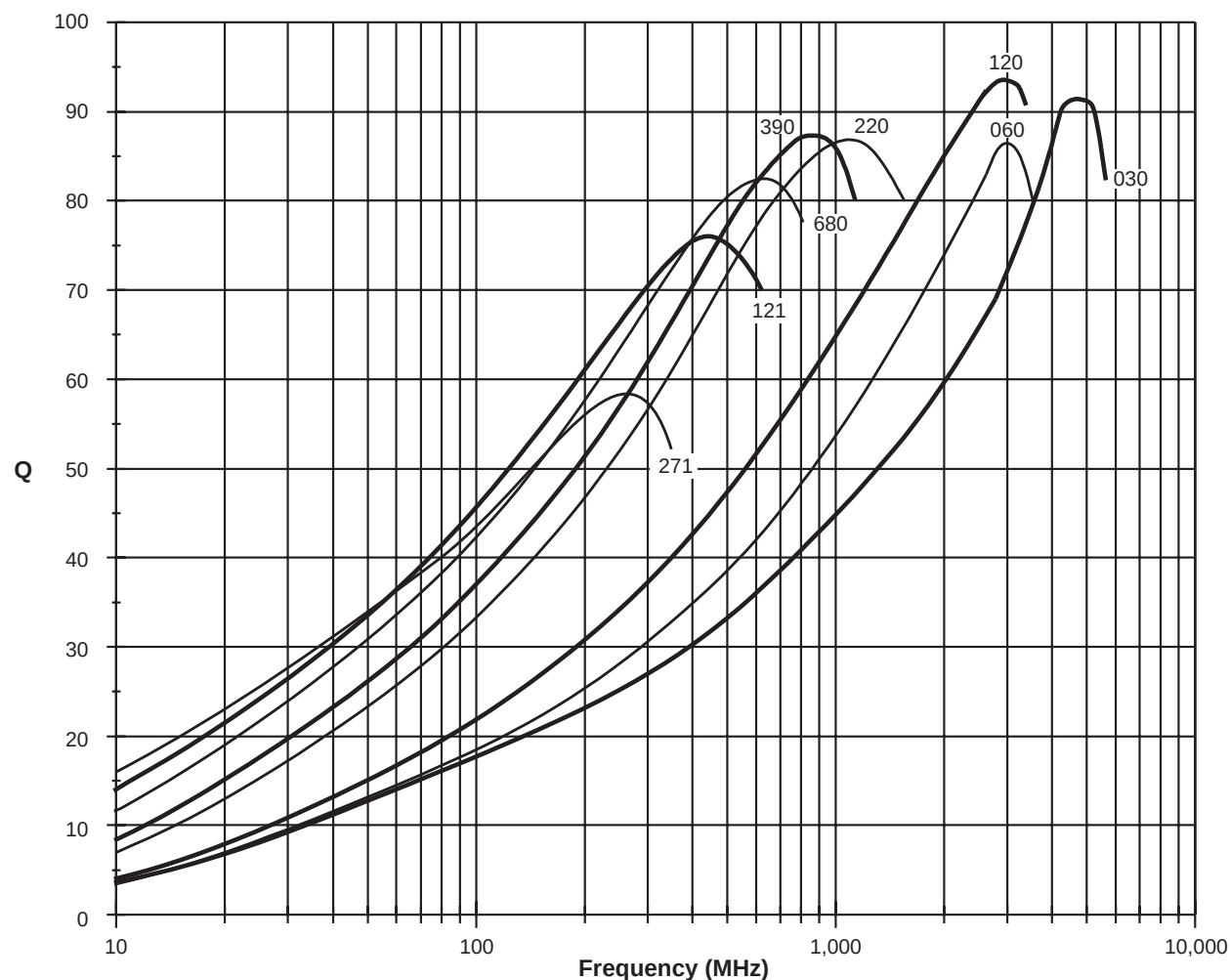
Specifications subject to change without notice. Document 100-1 Revised 9/1/99

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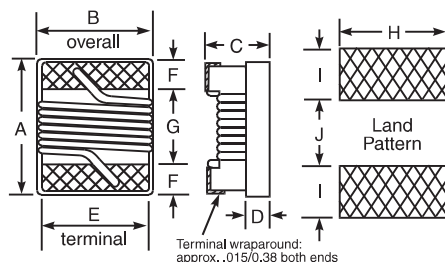
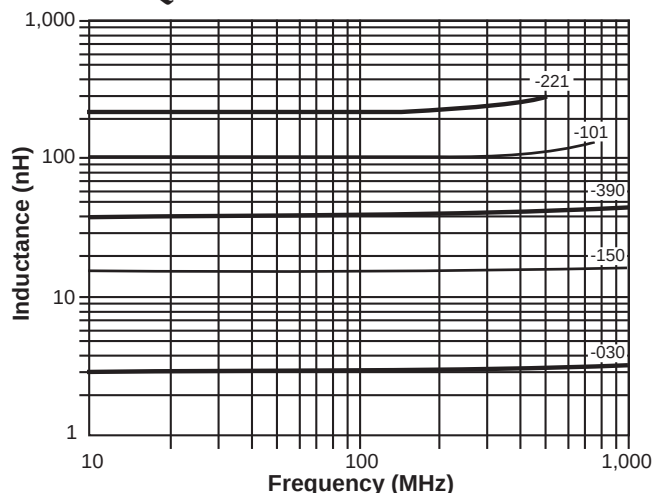
0805CS Series (2012)

S-Parameter files
ON OUR WEB SITE OR CD
PSPICE models
SEE DOC 158

TYPICAL Q vs FREQUENCY



L vs FREQUENCY



A	B	C	D	E	F	G	H	I	J
Max.	Max.	Max.	Ref.						
.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: 8mm
For packaging data see "Tape and Reel Specifications" (Document 173)

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Specifications subject to change without notice. Document 100-2 Revised 5/19/99

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