

Chip Inductors—1206CS Series (3216)

High SRF chip inductor in 1206 footprint. Excellent Q values. Ceramic core makes tolerances as low as $\pm 1\%$ a practical and economical alternative to traditional mechanical tuning. The non-magnetic core also ensures the utmost in

thermal stability, predictability and consistency.

Coilcraft **Designer's Kit C120** contains samples of all 5% inductance tolerance parts. 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)
1206CS-030X_B_	3.3 @ 100 MHz	20,10, 5	30 @ 300 MHz	6200	.050	1000
1206CS-060X_B_	6.8 @ 100 MHz	20,10, 5	30 @ 300 MHz	5500	.070	1000
1206CS-100X_B_	10 @ 100 MHz	20,10, 5	40 @ 300 MHz	4000	.080	1000
1206CS-120X_B_	12 @ 100 MHz	20,10, 5	40 @ 300 MHz	3200	.080	1000
1206CS-150X_B_	15 @ 100 MHz	20,10, 5	40 @ 300 MHz	3200	.100	1000
1206CS-180X_B_	18 @ 100 MHz	20,10, 5,2	50 @ 300 MHz	2800	.100	1000
1206CS-220X_B_	22 @ 100 MHz	20,10, 5,2	50 @ 300 MHz	2200	.100	1000
1206CS-270X_B_	27 @ 100 MHz	20,10, 5,2	50 @ 300 MHz	1800	.110	1000
1206CS-330X_B_	33 @ 100 MHz	20,10, 5,2	55 @ 300 MHz	1800	.110	1000
1206CS-390X_B_	39 @ 100 MHz	20,10, 5,2	55 @ 300 MHz	1800	.120	1000
1206CS-470X_B_	47 @ 100 MHz	20,10, 5,2	55 @ 300 MHz	1500	.130	1000
1206CS-560X_B_	56 @ 100 MHz	20,10, 5,2,1	55 @ 300 MHz	1450	.140	1000
1206CS-680X_B_	68 @ 100 MHz	20,10, 5,2,1	55 @ 300 MHz	1200	.260	900
1206CS-820X_B_	82 @ 100 MHz	20,10, 5,2,1	55 @ 300 MHz	1200	.210	900
1206CS-101X_B_	100 @ 100 MHz	20,10, 5,2,1	55 @ 300 MHz	1100	.260	850
1206CS-121X_B_	120 @ 100 MHz	20,10, 5,2,1	60 @ 300 MHz	1100	.260	800
1206CS-151X_B_	150 @ 100 MHz	20,10, 5,2,1	60 @ 300 MHz	950	.310	750
1206CS-181X_B_	180 @ 50 MHz	20,10, 5,2,1	60 @ 300 MHz	900	.430	700
1206CS-221X_B_	220 @ 50 MHz	20,10, 5,2,1	60 @ 300 MHz	760	.500	670
1206CS-271X_B_	270 @ 50 MHz	20,10, 5,2,1	55 @ 300 MHz	730	.560	630
1206CS-331X_B_	330 @ 50 MHz	20,10, 5,2,1	45 @ 150 MHz	650	.620	590
1206CS-391X_B_	390 @ 50 MHz	20,10, 5,2,1	45 @ 150 MHz	600	.750	530
1206CS-471X_B_	470 @ 50 MHz	20,10, 5,2,1	45 @ 150 MHz	550	1.30	490
1206CS-561X_B_	560 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	470	1.34	460
1206CS-621X_B_	620 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	470	1.58	460
1206CS-681X_B_	680 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	450	1.58	430
1206CS-751X_B_	750 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	440	2.25	320
1206CS-821X_B_	820 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	420	1.82	400
1206CS-911X_B_	910 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	410	2.95	310
1206CS-102X_B_	1000 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	400	2.80	320
1206CS-122X_B_	1200 @ 35 MHz	20,10, 5,2,1	45 @ 150 MHz	380	3.20	300

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

Inductance tolerance code:

Table above shows stock tolerances in bold.
F = $\pm 1\%$, G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$

1206CS-122X_B_

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.

- Inductance measured using Coilcraft SMD-A fixture in Agilent/HP4286A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
- Tolerances in bold are stocked for immediate shipment.
- Q measured using Agilent/HP4291A with Agilent/HP16193 test fixture and on Agilent/HP8753D with Coilcraft SMD-D test fixture.
- SRF measured using Agilent/HP8720D network analyzer and Coilcraft SMD-D test fixture.
- DCR measured on Cambridge Technology Micro-ohmmeter and Coilcraft CCF 840 fixture.
- For 15° C rise.
- Operating temperature range -40° C to +125° C.
- Electrical specifications at 25° C.
- For environmental data, see "Product Specifications" page (Doc. 121).
- For part marking data, see "Color Coding" page (Doc. 174).

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

Coilcraft

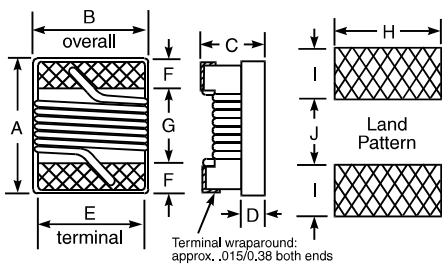
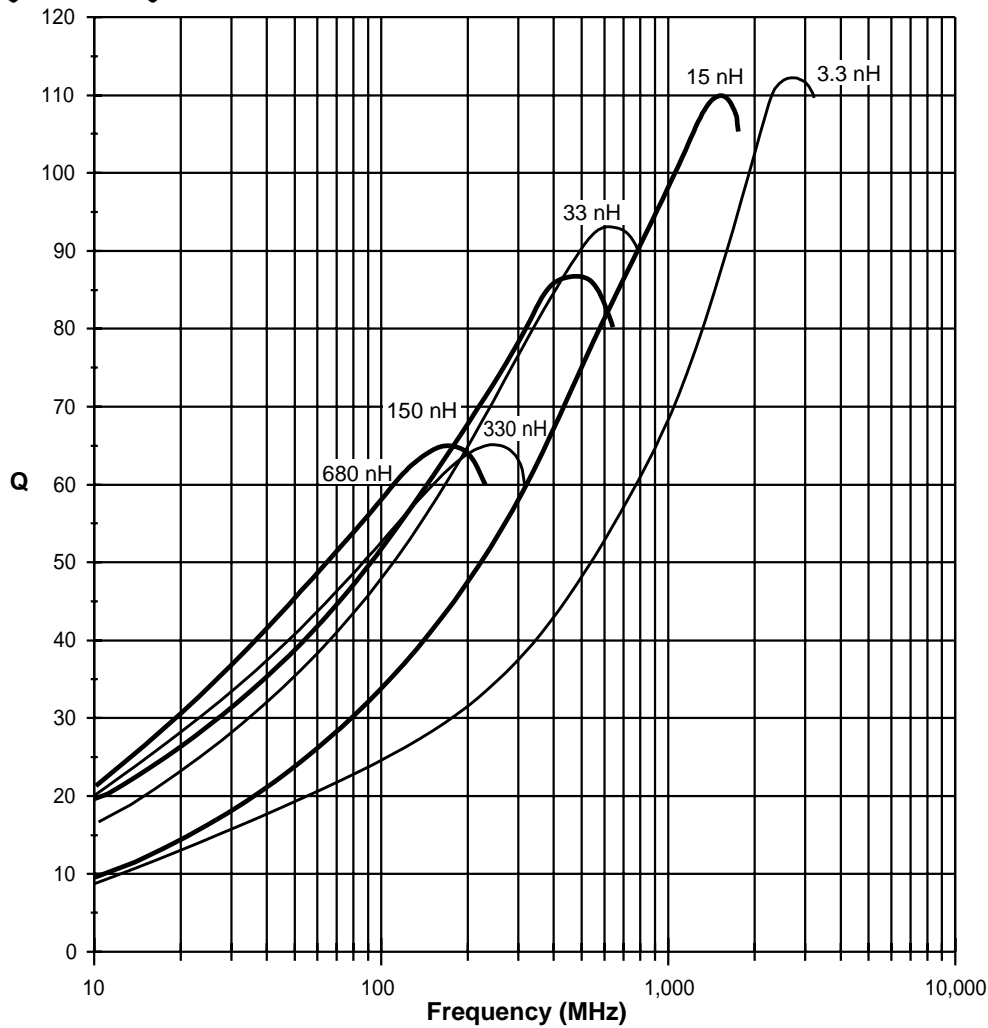
Specifications subject to change without notice. Document 104-1 Revised 4/19/01

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

1206CS Series (3216)

S-Parameter files
ON OUR WEB SITE OR CD
PSpice models
SEE CATALOG, WEB SITE OR CD

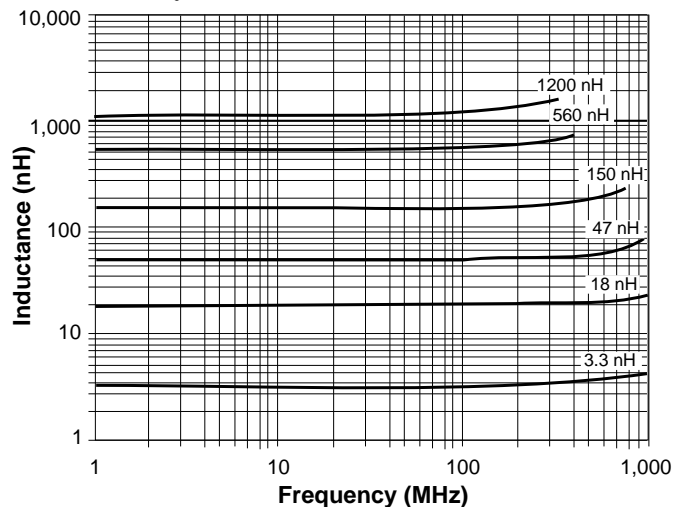
TYPICAL Q vs FREQUENCY



A	B	C	D	E	F	G	H	I	J
Max.	Max.	Max.	Ref.						
.140	.085	.060	.020	.056	.020	.080	.076	.040	.070
3,56	2,16	1,52	0,51	1,42	0,51	2,03	1,93	1,02	1,78

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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