Chip Inductors–1206CS Series (3216)

High SRF chip inductor in 1206 footprint. Excellent Q values. Ceramic core makes tolerances as low as ± 1% a practical and economical alternative to traditional mechanical tuning. The non-magnetic core also assures 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)	R_{DC} Max[6] (Ohms)	I_{DC} Max[7] (mA)
1206CS-030X_BC	3.3 @ 100 MHz	**20,10,**5	30 @ 300 MHz	6200	.050	1000
1206CS-060X_BC	6.8 @ 100 MHz	**20,10,5**	30 @ 300 MHz	5500	.070	1000
1206CS-100X_BC	10 @ 100 MHz	**20,10,5**	40 @ 300 MHz	4000	.080	1000
1206CS-120X_BC	12 @ 100 MHz	**20,10,5**	40 @ 300 MHz	3200	.080	1000
1206CS-150X_BC	15 @ 100 MHz	**20,10,5**	40 @ 300 MHz	3200	.100	1000
1206CS-180X_BC	18 @ 100 MHz	**20,10,5,**2	50 @ 300 MHz	2800	.100	1000
1206CS-220X_BC	22 @ 100 MHz	**20,10,5,**2	50 @ 300 MHz	2200	.100	1000
1206CS-270X_BC	27 @ 100 MHz	**20,10,5,**2	50 @ 300 MHz	1800	.110	1000
1206CS-330X_BC	33 @ 100 MHz	**20,10,5,**2	55 @ 300 MHz	1800	.110	1000
1206CS-390X_BC	39 @ 100 MHz	**20,10,5,**2	55 @ 300 MHz	1800	.120	1000
1206CS-470X_BC	47 @ 100 MHz	**20,10,5,**2	55 @ 300 MHz	1500	.130	1000
1206CS-560X_BC	56 @ 100 MHz	**20,10,5,**2,1	55 @ 300 MHz	1450	.140	1000
1206CS-680X_BC	68 @ 100 MHz	**20,10,5,**2,1	55 @ 300 MHz	1200	.260	900
1206CS-820X_BC	82 @ 100 MHz	**20,10,5,**2,1	55 @ 300 MHz	1200	.210	900
1206CS-101X_BC	100 @ 100 MHz	**20,10,5,**2,1	55 @ 300 MHz	1100	.260	850
1206CS-121X_BC	120 @ 100 MHz	**20,10,5,**2,1	60 @ 300 MHz	1100	.260	800
1206CS-151X_BC	150 @ 100 MHz	**20,10,5,**2,1	60 @ 300 MHz	950	.310	750
1206CS-181X_BC	180 @ 50 MHz	**20,10,5,**2,1	60 @ 300 MHz	900	.430	700
1206CS-221X_BC	220 @ 50 MHz	**20,10,5,**2,1	60 @ 300 MHz	760	.500	670
1206CS-271X_BC	270 @ 50 MHz	**20,10,5,**2,1	55 @ 300 MHz	730	.560	630
1206CS-331X_BC	330 @ 50 MHz	**20,10,5,**2,1	45 @ 150 MHz	650	.620	590
1206CS-391X_BC	390 @ 50 MHz	**20,10,5,**2,1	45 @ 150 MHz	600	.750	530
1206CS-471X_BC	470 @ 50 MHz	**20,10,5,**2,1	45 @ 150 MHz	550	1.30	490
1206CS-561X_BC	560 @ 35 MHz	**20,10,5,**2,1	45 @ 150 MHz	470	1.34	460
1206CS-681X_BC	680 @ 35 MHz	**20,10,5,**2,1	45 @ 150 MHz	450	1.58	430
1206CS-821X_BC	820 @ 35 MHz	**20,10,5,**2,1	45 @ 150 MHz	420	1.82	400
1206CS-102X_BC	1000 @ 35 MHz	**20,10,5,**2,1	45 @ 150 MHz	400	2.80	320
1206CS-122X_BC	1200 @ 35 MHz	**20,10,5,**2,1	45 @ 150 MHz	380	3.20	300

• For environmental data see "Product Specifications" section (Document 121).
• For part marking data see "Color Coding" section (Document 174).

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

1206CS-122X_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 CCF 840 fixture.
7. For 15°C rise.
8. Operating temperature range –40°C to +125°C.

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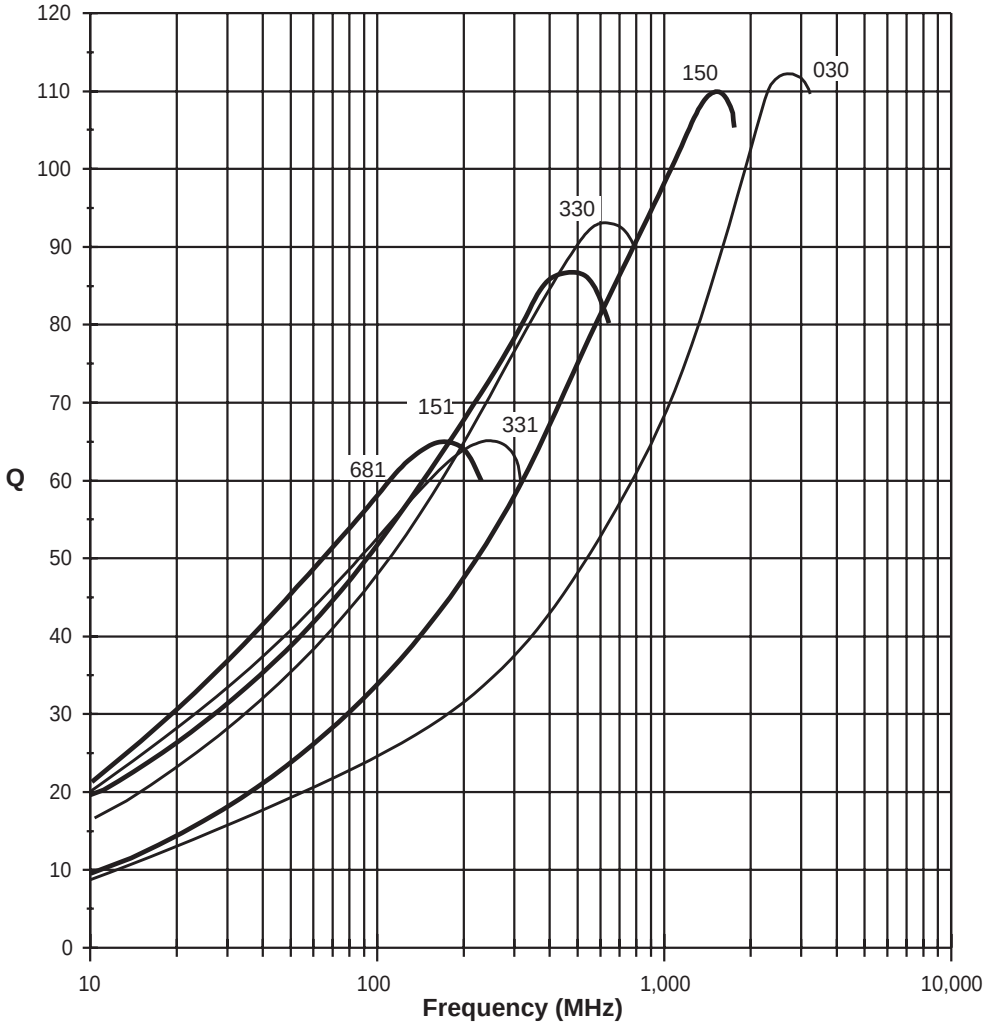
E-mail info@coilcraft.com **Data by Fax** 800/651-6974 **Web** http://www.coilcraft.com

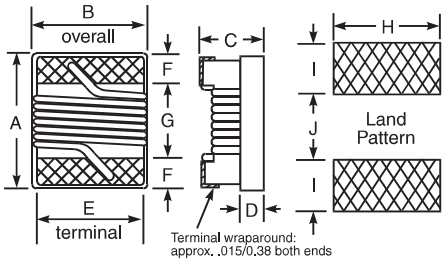
1206CS Series (3216)

S-Parameter files
ON OUR WEB SITE OR CD

PSPICE models
SEE DOC 158

TYPICAL Q vs FREQUENCY

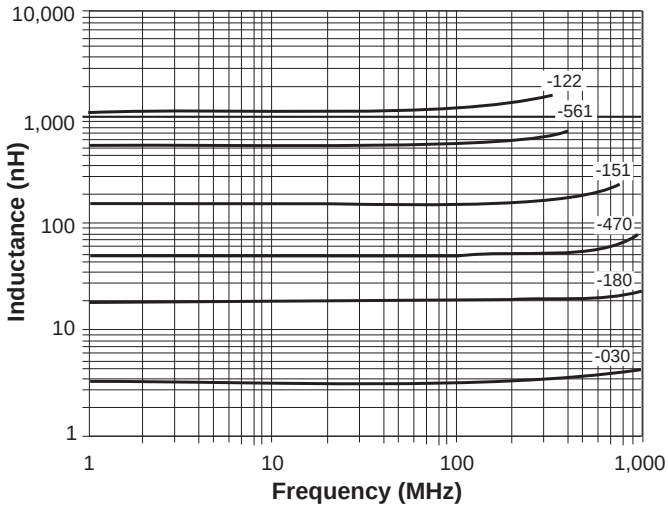




A Max.	B Max.	C Max.	D Ref.	E	F	G	H	I	J
.140	.085	.060	.020	.056	.020	.080	.076	.040	.070
3,56	2,16	1,52	0,51	1,42	0,51	2,03	1,93	1,02	1,78

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

L vs FREQUENCY



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