

Chip Inductors-1008CS Series (2520)

Coilcraft "CS" series chip inductors have been designed especially for the needs of today's high frequency designer. Their ceramic construction delivers the highest possible SRF's as well as excellent Q values. The non-magnetic coilform also assures the

utmost in thermal stability, predictability and batch consistency.

Coilcraft **Designer's Kit C100** contains samples of all the standard parts shown. Kits with 5% and 2% inductance tolerance are also available.

Part Number	Inductance ¹ (nH)	Percent Tolerance ²	Q Min ³	SRF Min ⁴ (MHz)	R _{DC} Max ⁵ (Ohms)	I _{DC} Max ⁶ (mA)
1008CT-040XMBC	4.7 @ 50 MHz	20 ,10	50 @ 1500 MHz	6000	.15	600
1008CT-080XMBC	8.2 @ 50 MHz	20 ,10	50 @ 1500 MHz	5000	.22	600
1008CS-100XMBC	10 @ 50 MHz	20 ,10,5	50 @ 500 MHz	4100	.08	1000
1008CS-120XMBC	12 @ 50 MHz	20 ,10,5	50 @ 500 MHz	3300	.09	1000
1008CS-150XMBC	15 @ 50 MHz	20 ,10,5	50 @ 500 MHz	2500	.10	1000
1008CS-180XMBC	18 @ 50 MHz	20 ,10,5	50 @ 350 MHz	2500	.11	1000
1008CS-220XMBC	22 @ 50 MHz	20 ,10,5	55 @ 350 MHz	2400	.12	1000
1008CS-270XMBC	27 @ 50 MHz	20 ,10,5,2	55 @ 350 MHz	1600	.13	1000
1008CS-330XMBC	33 @ 50 MHz	20 ,10,5,2	60 @ 350 MHz	1600	.14	1000
1008CS-390XMBC	39 @ 50 MHz	20 ,10,5,2	60 @ 350 MHz	1500	.15	1000
1008CS-470XMBC	47 @ 50 MHz	20 ,10,5,2	65 @ 350 MHz	1500	.16	1000
1008CS-560XKBC	56 @ 50 MHz	10 ,5,2	65 @ 350 MHz	1300	.18	1000
1008CS-680XKBC	68 @ 50 MHz	10 ,5,2	65 @ 350 MHz	1300	.20	1000
1008CS-820XKBC	82 @ 50 MHz	10 ,5,2	60 @ 350 MHz	1000	.22	1000
1008CS-101XKBC	100 @ 25 MHz	10 ,5,2,1	60 @ 350 MHz	1000	.56	650
1008CS-121XKBC	120 @ 25 MHz	10 ,5,2,1	60 @ 350 MHz	950	.63	650
1008CS-151XKBC	150 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	850	.70	580
1008CS-181XKBC	180 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	750	.77	620
1008CS-221XKBC	220 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	700	.84	500
1008CS-271XKBC	270 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	600	.91	500
1008CS-331XKBC	330 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	570	1.05	450
1008CS-391XKBC	390 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	500	1.12	470
1008CS-471XKBC	470 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	450	1.19	470
1008CS-561XKBC	560 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	415	1.33	400
1008CS-621XKBC	620 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	375	1.40	300
1008CS-681XKBC	680 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	375	1.47	400
1008CS-751XKBC	750 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	360	1.54	360
1008CS-821XKBC	820 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	350	1.61	400
1008CS-911XKBC	910 @ 25 MHz	10 ,5,2,1	35 @ 50 MHz	320	1.68	380
1008CS-102XKBC	1000 @ 25 MHz	10 ,5,2,1	35 @ 50 MHz	290	1.75	370
1008CS-122XKBC	1200 @ 7.9 MHz	10 ,5,2	35 @ 50 MHz	250	2.0	310
1008CS-152XKBC	1500 @ 7.9 MHz	10 ,5,2	28 @ 50 MHz	200	2.3	330
1008CS-182XKBC	1800 @ 7.9 MHz	10 ,5,2	28 @ 50 MHz	160	2.6	300
1008CS-222XKBC	2200 @ 7.9 MHz	10 ,5,2	28 @ 50 MHz	160	2.8	280
1008CS-272XKBC	2700 @ 7.9 MHz	10 ,5,2	22 @ 25 MHz	140	3.2	290
1008CS-332XKBC	3300 @ 7.9 MHz	10 ,5,2	22 @ 25 MHz	110	3.4	290
1008CS-392XKBC	3900 @ 7.9 MHz	10 ,5,2	20 @ 25 MHz	100	3.6	260
1008CS-472XKBC	4700 @ 7.9 MHz	10 ,5,2	20 @ 25 MHz	90	4.0	260

For help ordering non-standard parts, see "Part Numbering" (Document 120).

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

For part marking data see "Color Coding" (Document 174).

- Inductance measured using Coilcraft SMD-A fixture in HP4191A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
- Bold number indicates standard tolerance. When ordering other tolerances, replace the third to the last letter in the part number with the proper tolerance code: F=1%, G=2%, J=5%, K=10%, M=20%. (e.g. 1008CS-100XJBC for a 5% tolerance part)

3. Q measured using HP4291A with HP16193 test fixture and on HP8753B with Coilcraft SMD-E test fixture.

4. SRF measured using HP8753B network analyzer and Coilcraft SMD-D test fixture.

5. R_{DC} measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF 840 test fixture.

6. For 15°C rise.

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

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
TEST FIXTURES

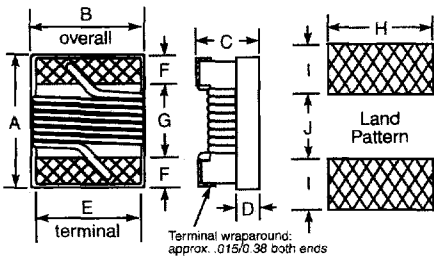
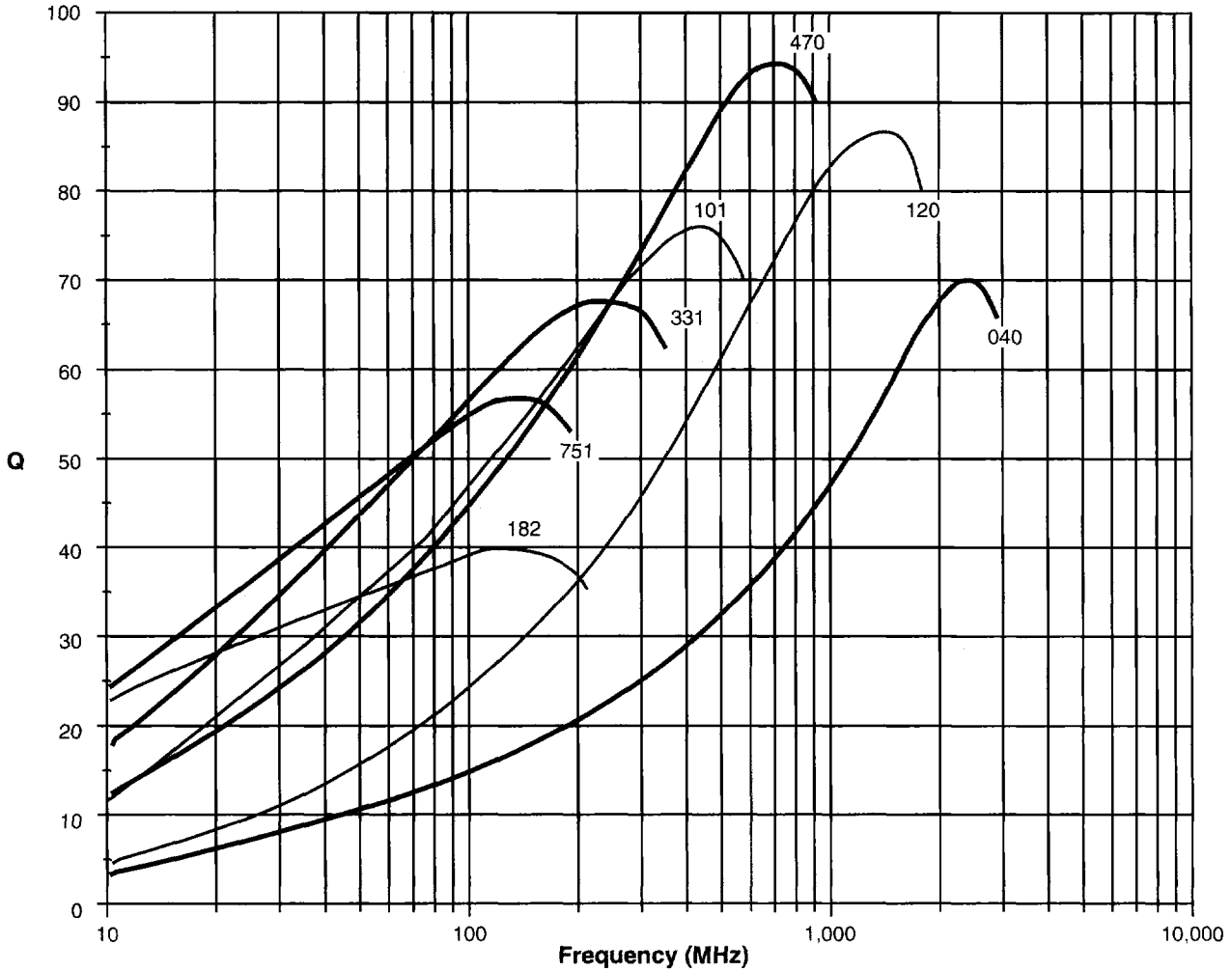
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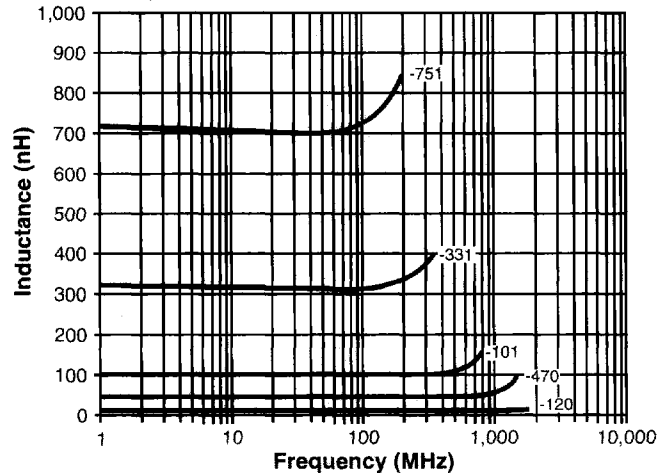
TYPICAL Q vs FREQUENCY



A	B	C*	D	E	F	G	H	I	J
Max.	Max.	Max.	Ref.						
.115	.110	.080	.020	.080	.020	.060	.100	.040	.050
2,92	2,79	2,03	0,51	2,03	0,51	1,52	2,54	1,02	1,27

*CT parts: .050/1,27
 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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