

# 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 excel-

lent Q values. The non-magnetic coilform also assures the utmost in thermal stability, predictability and batch consistency.

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

- 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)

- Q measured using HP4291A with HP16193 test fixture and on HP8753B with Coilcraft SMD-E test fixture.
- SRF measured using HP8753B network analyzer and Coilcraft SMD-D test fixture.
- R<sub>DC</sub> measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF 840 test fixture.
- For 15°C rise.

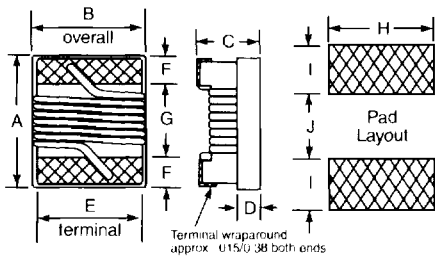
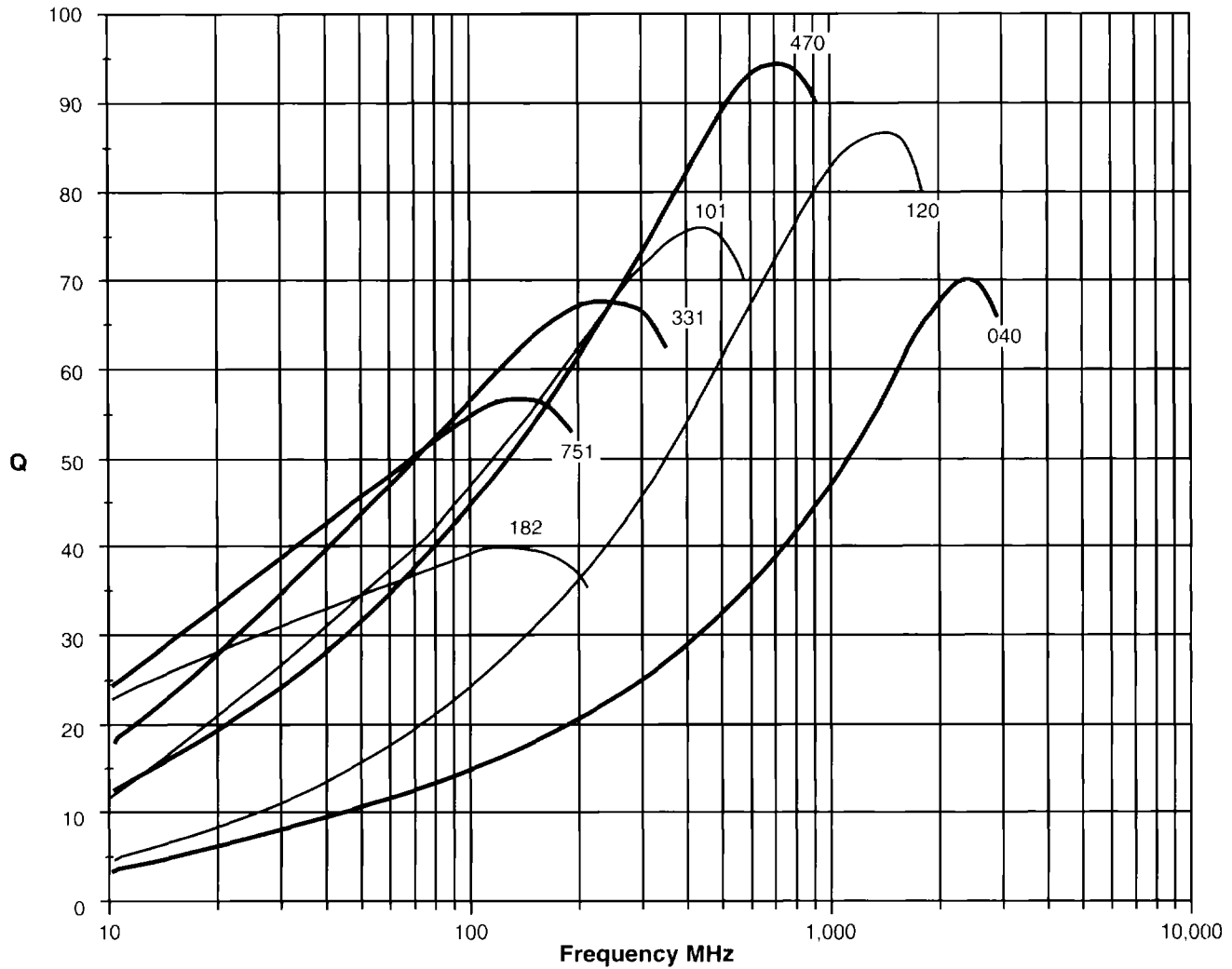


Document 101-1 Revised 7/17/95

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail info@coilcraft.com Data by Fax 800/651-6974 Web http://www.coilcraft.com

# 1008CS Series (2520)

## 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



Document 101-2 Revised 2/1/96