

Chip Inductors - 1008HS Series (2520)

Coilcraft "HS" 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 C107** contains samples of all the standard parts shown. A kit with 5% inductance tolerance is 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)
1008HS-100TMBC	10 @ 50 MHz	20 ,10,5	50 @ 500 MHz	4100	.08	1000
1008HS-120TMBC	12 @ 50 MHz	20 ,10,5	50 @ 500 MHz	3300	.09	1000
1008HS-150TMBC	15 @ 50 MHz	20 ,10,5	50 @ 500 MHz	2500	.10	1000
1008HS-180TMBC	18 @ 50 MHz	20 ,10,5	50 @ 350 MHz	2500	.11	1000
1008HS-220TMBC	22 @ 50 MHz	20 ,10,5	55 @ 350 MHz	2400	.12	1000
1008HS-270TMBC	27 @ 50 MHz	20 ,10,5,2	55 @ 350 MHz	1600	.13	1000
1008HS-330TMBC	33 @ 50 MHz	20 ,10,5,2	60 @ 350 MHz	1600	.14	1000
1008HS-390TMBC	39 @ 50 MHz	20 ,10,5,2	60 @ 350 MHz	1500	.15	1000
1008HS-470TMBC	47 @ 50 MHz	20 ,10,5,2	65 @ 350 MHz	1500	.16	1000
1008HS-560TKBC	56 @ 50 MHz	10 ,5,2	65 @ 350 MHz	1300	.18	1000
1008HS-680TKBC	68 @ 50 MHz	10 ,5,2	65 @ 350 MHz	1300	.20	1000
1008HS-820TKBC	82 @ 50 MHz	10 ,5,2	60 @ 350 MHz	1000	.22	1000
1008HS-101TKBC	100 @ 25 MHz	10 ,5,2,1	60 @ 350 MHz	1000	.56	650
1008HS-121TKBC	120 @ 25 MHz	10 ,5,2,1	60 @ 350 MHz	950	.63	650
1008HS-151TKBC	150 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	850	.70	580
1008HS-181TKBC	180 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	750	.77	620
1008HS-221TKBC	220 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	700	.84	500
1008HS-271TKBC	270 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	600	.91	500
1008HS-331TKBC	330 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	570	1.05	450
1008HS-391TKBC	390 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	500	1.12	470
1008HS-471TKBC	470 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	450	1.19	470
1008HS-561TKBC	560 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	415	1.33	400
1008HS-621TKBC	620 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	375	1.40	300
1008HS-681TKBC	680 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	375	1.47	400
1008HS-751TKBC	750 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	360	1.54	360
1008HS-821TKBC	820 @ 25 MHz	10 ,5,2,1	45 @ 100 MHz	350	1.61	400
1008HS-911TKBC	910 @ 25 MHz	10 ,5,2,1	35 @ 50 MHz	320	1.68	380
1008HS-102TKBC	1000 @ 25 MHz	10 ,5	35 @ 50 MHz	290	1.75	370

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).

1. Inductance measured using Coilcraft SMD-A fixture in HP4191A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
2. 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. 1008HS-100TJBC 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
REPEATABLE
PRECISION MEASUREMENTS
PAGE 126 **TEST FIXTURES**

Coilcraft

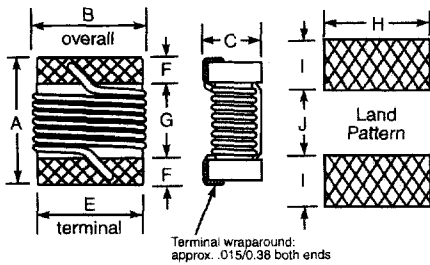
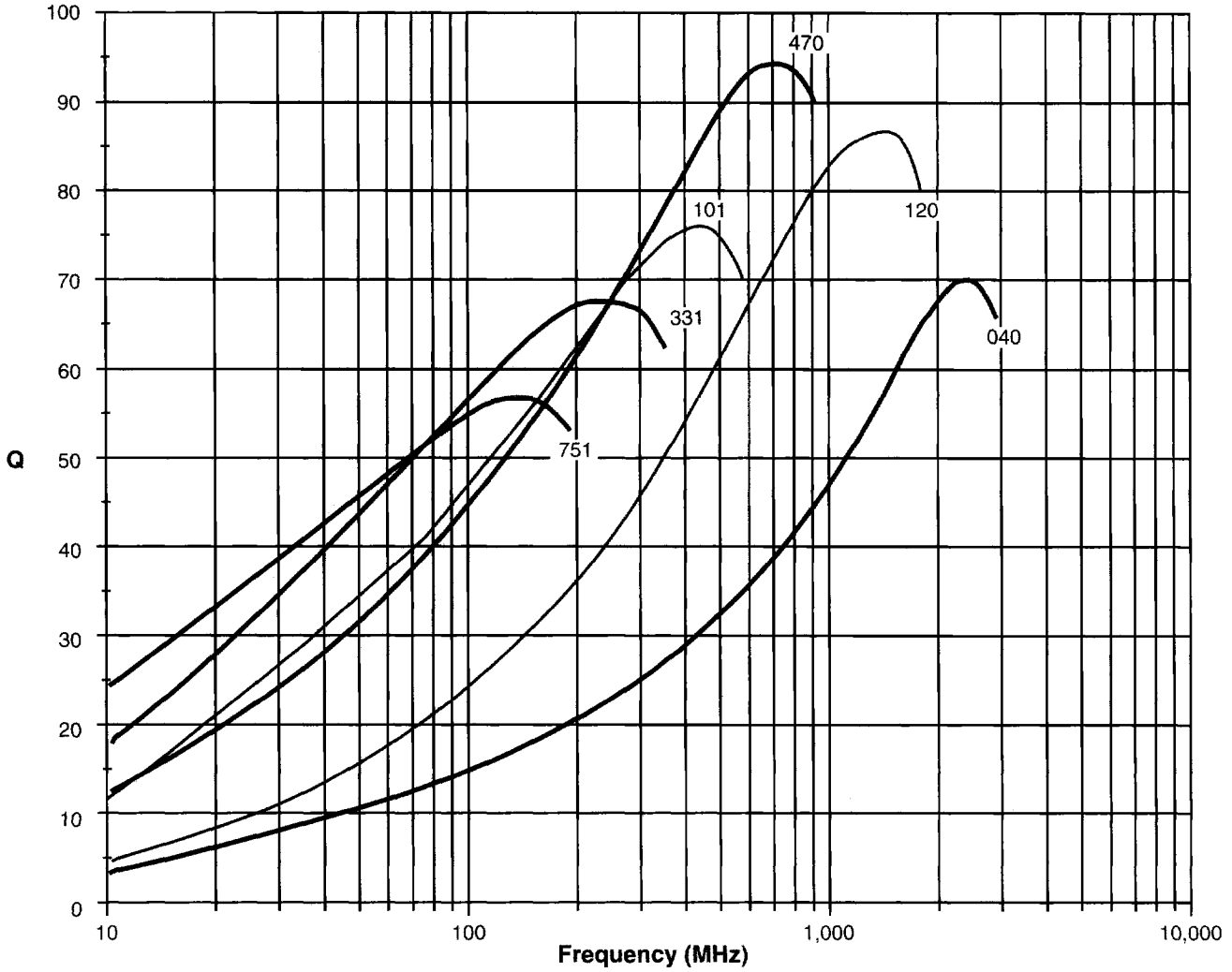
Document 160-1 Revised 6/24/97

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

1008HS Series (2520)



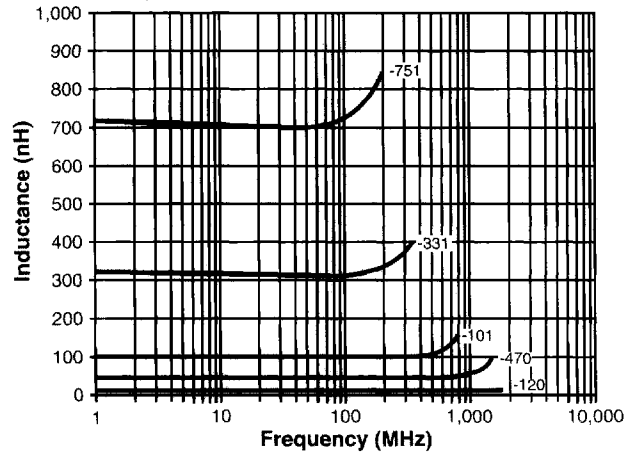
TYPICAL Q vs FREQUENCY



A	B	C	E	F	G	H	I	J
Max.	Max.	Max.						
.105	.095	.070	.080	.020	.060	.100	.040	.050
2.67	2.41	1.78	2.03	0.51	1.52	2.54	1.02	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



Document 160-2 Revised 6/24/97