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.

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

• 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:

1008HS-102T_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 test fixture.
7. For 15°C rise.
8. Operating temperature range –40° to +125°C.
9. Electrical specifications at 25°C.

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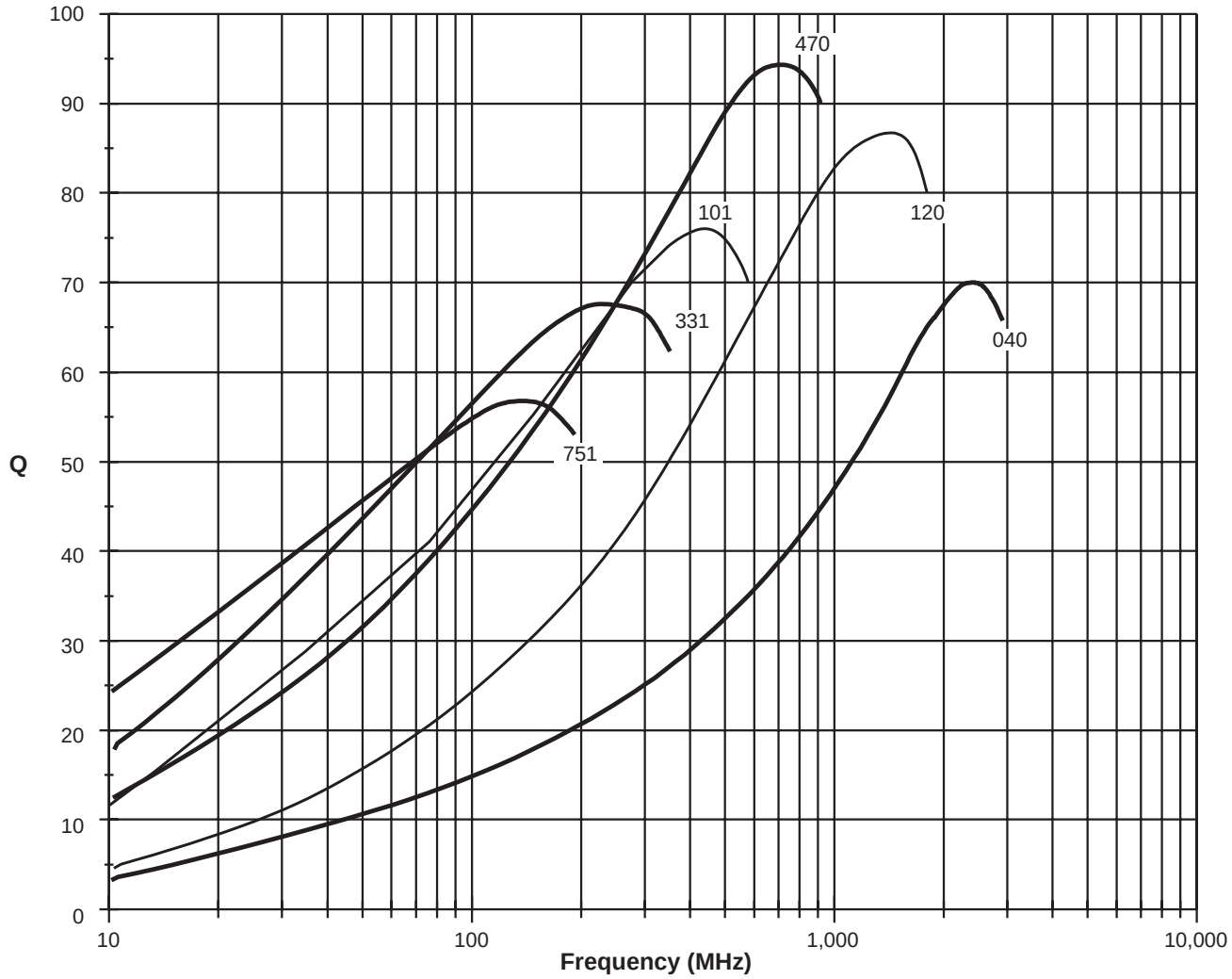
E-mail info@coilcraft.com **Data by Fax** 800/651-6974 **Web** http://www.coilcraft.com

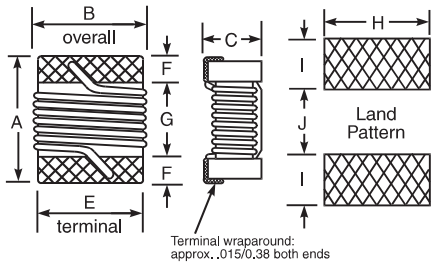
1008HS Series (2520)

S-Parameter files
ON OUR WEB SITE OR CD

PSPICE models
SEE DOC 158

TYPICAL Q vs FREQUENCY

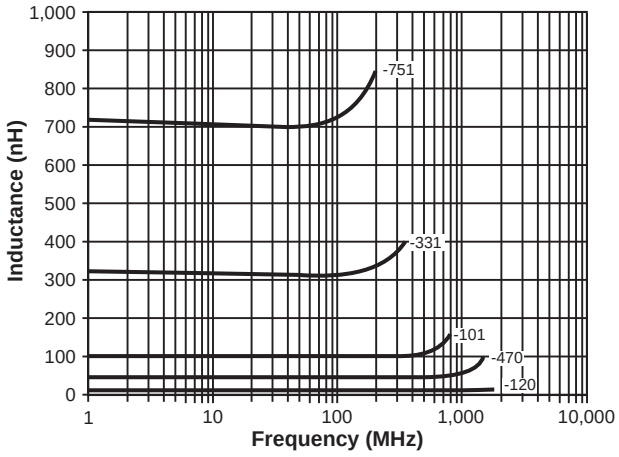




A Max.	B Max.	C Max.	E	F	G	H	I	J
.105	.095	.070	.080	.020	.060	.100	.040	.050
2,67	2,41	1,78	2,03	0,51	1,52	2,54	1,02	1,27

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

L vs FREQUENCY



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