

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

Inductance ² Part number ¹	Percent (nH)	SRF min ⁵ tolerance ³	DCR max ⁶ Q min ⁴	Irms ⁷ (MHz)	(Ohms)	(mA)
1008HS-100T_B_	10 @ 50 MHz	5	50 @ 500 MHz	4100	0.08	1000
1008HS-120T_B_	12 @ 50 MHz	5	50 @ 500 MHz	3300	0.09	1000
1008HS-150T_B_	15 @ 50 MHz	5	50 @ 500 MHz	2500	0.10	1000
1008HS-180T_B_	18 @ 50 MHz	5	50 @ 350 MHz	2500	0.11	1000
1008HS-220T_B_	22 @ 50 MHz	5	55 @ 350 MHz	2400	0.12	1000
1008HS-270T_B_	27 @ 50 MHz	5,2	55 @ 350 MHz	1600	0.13	1000
1008HS-330T_B_	33 @ 50 MHz	5,2	60 @ 350 MHz	1600	0.14	1000
1008HS-390T_B_	39 @ 50 MHz	5,2	60 @ 350 MHz	1500	0.15	1000
1008HS-470T_B_	47 @ 50 MHz	5,2,1	65 @ 350 MHz	1500	0.16	1000
1008HS-560T_B_	56 @ 50 MHz	5,2,1	65 @ 350 MHz	1300	0.18	1000
1008HS-680T_B_	68 @ 50 MHz	5,2,1	65 @ 350 MHz	1300	0.20	1000
1008HS-820T_B_	82 @ 50 MHz	5,2,1	60 @ 350 MHz	1000	0.22	1000
1008HS-101T_B_	100 @ 25 MHz	5,2,1	60 @ 350 MHz	1000	0.56	650
1008HS-121T_B_	120 @ 25 MHz	5,2,1	60 @ 350 MHz	950	0.63	650
1008HS-151T_B_	150 @ 25 MHz	5,2,1	45 @ 100 MHz	850	0.70	580
1008HS-181T_B_	180 @ 25 MHz	5,2,1	45 @ 100 MHz	750	0.77	620
1008HS-221T_B_	220 @ 25 MHz	5,2,1	45 @ 100 MHz	700	0.84	500
1008HS-271T_B_	270 @ 25 MHz	5,2,1	45 @ 100 MHz	600	0.91	500
1008HS-331T_B_	330 @ 25 MHz	5,2,1	45 @ 100 MHz	570	1.05	450
1008HS-391T_B_	390 @ 25 MHz	5,2,1	45 @ 100 MHz	500	1.12	470
1008HS-471T_B_	470 @ 25 MHz	5,2,1	45 @ 100 MHz	450	1.19	470
1008HS-561T_B_	560 @ 25 MHz	5,2,1	45 @ 100 MHz	415	1.33	400
1008HS-621T_B_	620 @ 25 MHz	5,2,1	45 @ 100 MHz	375	1.40	300
1008HS-681T_B_	680 @ 25 MHz	5,2,1	45 @ 100 MHz	375	1.47	400
1008HS-751T_B_	750 @ 25 MHz	5,2,1	45 @ 100 MHz	360	1.54	360
1008HS-821T_B_	820 @ 25 MHz	5,2,1	45 @ 100 MHz	350	1.61	400
1008HS-911T_B_	910 @ 25 MHz	5,2,1	35 @ 50 MHz	320	1.68	380
1008HS-102T_B_	1000 @ 25 MHz	5,2	35 @ 50 MHz	290	1.75	370

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

1008HS-102T **G B C**

Tolerance: F = 1% G = 2% J = 5%

(Table shows stock tolerances in bold.)

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

- Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
 - Tolerances in bold are stocked for immediate shipment.
 - Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
 - SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
 - DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF840 test fixture.
 - Average current for a 15°C rise above 25°C ambient.
 - Operating temperature range -40°C to +125°C.
 - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data. For part marking data, see Color Coding section.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX TEST FIXTURES

Coilcraft[®]

Specifications subject to change without notice.
Please check our website for latest information.

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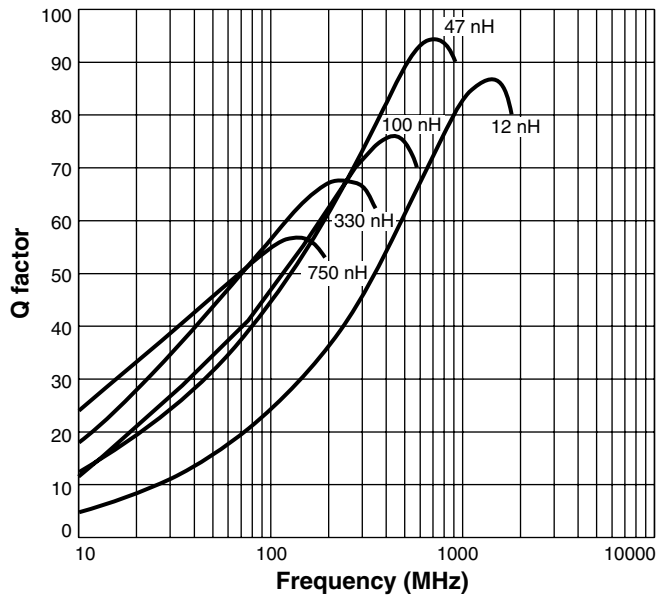
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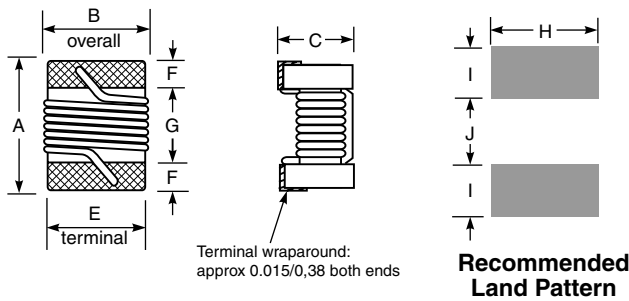
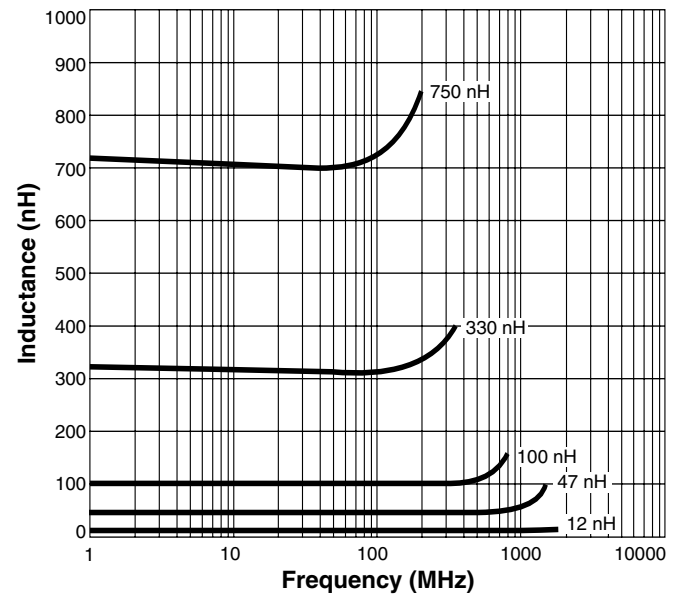
S-Parameter files
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1008HS Series (2520)

Typical Q vs Frequency



Typical L vs Frequency



A max	B max	C max	E	F	G	H	I	J
0.105	0.095	0.070	0.080	0.020	0.060	0.100	0.040	0.050
2,67	2,41	1,78	2,03	0,51	1,52	2,54	1,02	1,27

Weight: 28.3 – 31.5 mg
Terminations: Silver-palladium-platinum
Tape and reel: 2000/7" reel; 7500/13" reel 8 mm tape width
 For packaging data see Tape and Reel Specifications section.



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 Please check our website for latest information. Document 160-2 Revised 12/28/04

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