



# Chip Inductor – 1008HT Series (2520)

These low-profile inductors are 40% thinner than our conventional 1008 body sizes. They feature standard inductance tolerances of 2 and 5%, high SRFs and very high Q.

Coilcraft **Designer's Kit C122** contains samples of all 5% inductance tolerance parts. To order, please contact Coilcraft or order on-line at <http://order.coilcraft.com>.

Part number <sup>1</sup>	Inductance <sup>2</sup> (nH)	Percent tolerance <sup>3</sup>	Q min <sup>4</sup>	SRF min <sup>5</sup> (MHz)	DCR max <sup>6</sup> (Ohms)	Irms <sup>7</sup> (mA)
1008HT-3N3T_B_	3.3 @ 250 MHz	<b>5</b>	65 @ 1500 MHz	7900	0.025	1000
1008HT-6N8T_B_	6.8 @ 250 MHz	<b>5</b>	70 @ 1500 MHz	5500	0.05	1000
1008HT-7N2T_B_	7.2 @ 250 MHz	<b>5</b>	70 @ 1500 MHz	4800	0.05	1000
1008HT-12NT_B_	12 @ 250 MHz	<b>5</b>	55 @ 700 MHz	3800	0.065	1000
1008HT-15NT_B_	15 @ 250 MHz	<b>5</b>	55 @ 700 MHz	2800	0.08	1000
1008HT-18NT_B_	18 @ 250 MHz	<b>5</b>	55 @ 500 MHz	3000	0.09	1000
1008HT-22NT_B_	22 @ 250 MHz	<b>5</b>	55 @ 500 MHz	2600	0.11	950
1008HT-27NT_B_	27 @ 250 MHz	<b>5,2</b>	55 @ 500 MHz	2400	0.13	850
1008HT-33NT_B_	33 @ 200 MHz	<b>5,2</b>	55 @ 350 MHz	2000	0.135	760
1008HT-39NT_B_	39 @ 200 MHz	<b>5,2</b>	55 @ 350 MHz	1900	0.17	700
1008HT-47NT_B_	47 @ 200 MHz	<b>5,2,1</b>	55 @ 350 MHz	1500	0.18	660
1008HT-56NT_B_	56 @ 150 MHz	<b>5,2,1</b>	50 @ 300 MHz	1500	0.18	620
1008HT-68NT_B_	68 @ 150 MHz	<b>5,2,1</b>	50 @ 300 MHz	1500	0.23	550
1008HT-82NT_B_	82 @ 150 MHz	<b>5,2,1</b>	40 @ 250 MHz	1300	0.35	500
1008HT-R10T_B_	100 @ 100 MHz	<b>5,2,1</b>	40 @ 250 MHz	1200	0.64	420
1008HT-R12T_B_	120 @ 100 MHz	<b>5,2,1</b>	40 @ 200 MHz	1090	0.55	350
1008HT-R14T_B_	140 @ 100 MHz	<b>5,2,1</b>	40 @ 200 MHz	1100	0.70	320
1008HT-R15T_B_	150 @ 100 MHz	<b>5,2,1</b>	40 @ 200 MHz	960	0.75	300
1008HT-R18T_B_	180 @ 50 MHz	<b>5,2,1</b>	40 @ 200 MHz	920	1.02	250
1008HT-R22T_B_	220 @ 50 MHz	<b>5,2,1</b>	34 @ 100 MHz	750	1.15	250
1008HT-R24T_B_	240 @ 50 MHz	<b>5,2</b>	32 @ 100 MHz	800	1.15	250
1008HT-R27T_B_	270 @ 50 MHz	<b>5,2</b>	32 @ 100 MHz	770	1.25	250
1008HT-R33T_B_	330 @ 25 MHz	<b>5,2</b>	32 @ 100 MHz	635	1.35	250
1008HT-R39T_B_	390 @ 25 MHz	<b>5,2</b>	32 @ 100 MHz	555	1.45	250
1008HT-R47T_B_	470 @ 25 MHz	<b>5,2</b>	32 @ 100 MHz	530	1.65	240
1008HT-R56T_B_	560 @ 25 MHz	<b>5,2</b>	32 @ 100 MHz	485	1.90	240

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

1008HT-R56T J 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 (7500 parts per full reel).

2. Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.

3. Tolerances in bold are stocked for immediate shipment.

4. Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.

5. SRF measured using an Agilent/HP 8720D network analyzer and a Coilcraft SMD-D test fixture.

6. DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF840 test fixture.

7. Average current for a 15°C rise above 25°C ambient.

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

9. 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**<sup>®</sup>

Specifications subject to change without notice.

Please check our website for latest information. Document 169-1 Revised 02/09/05

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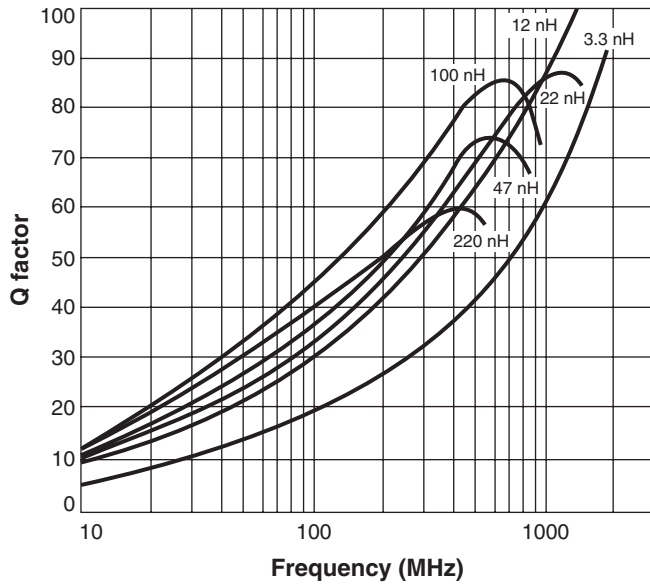
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>



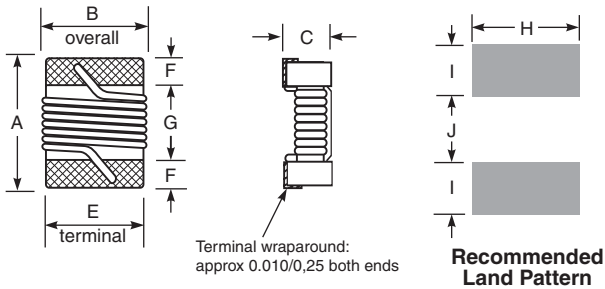
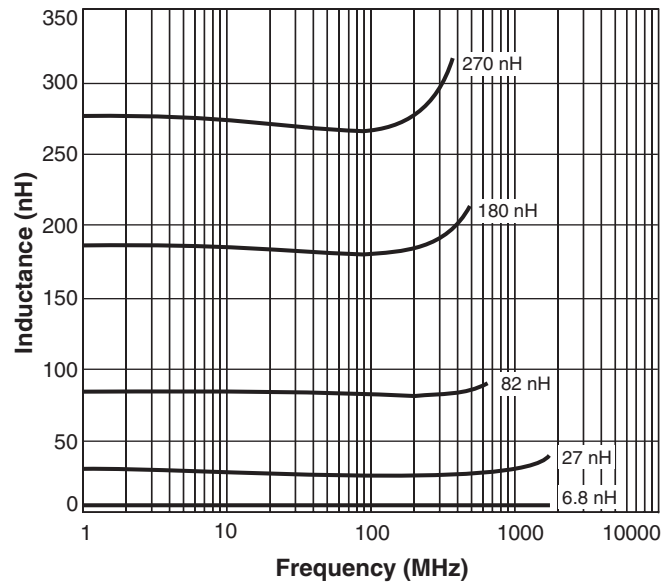
# Chip Inductor – 1008HT Series (2520)

**S-Parameter files**  
ON OUR WEB SITE OR CD  
**SPICE models**  
ON OUR WEB SITE OR CD

Typical Q vs Frequency



Typical L vs Frequency



A max	B max	C max	E	F	G	H	I	J
0.105	0.095	0.045	0.080	0.020	0.060	0.100	0.040	0.050
2,56	2,41	1,14	2,03	0,51	1,52	2,54	1,02	1,27

**Weight:** 16.0 – 17.6 mg  
**Terminations:** Platinum/palladium/silver  
**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 169-2 Revised 12/15/04

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