



# 1008LS Chip Inductors for VDSL Filters

These low cost chip inductors are ideal for use in the bandpass and data separation filters used in VDSL implementations. Their wirewound design and ferrite core provide high Q factors, low DCR and high current handling.

Coilcraft offers a library of reference designs for various xDSL filters using these and other surface mount compo-

nents. We can also provide several complete low pass and band pass filter modules in space-saving SIP configurations.

For free evaluation samples or more information, please contact Coilcraft or visit [www.coilcraft.com/xdsl](http://www.coilcraft.com/xdsl).

Part number <sup>1</sup>	Inductance <sup>2</sup> ( $\mu$ H)	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)
1008LS-122X_B_	1.2 @ 7.9 MHz	10, <b>5</b>	48 @ 50 MHz	210	0.68	650
1008LS-152X_B_	1.5 @ 7.9MHz	10, <b>5</b>	41 @ 50 MHz	190	0.76	630
1008LS-182X_B_	1.8 @ 7.9MHz	10, <b>5</b>	39 @ 50 MHz	170	0.84	600
1008LS-222X_B_	2.2 @ 7.9MHz	10, <b>5</b>	34 @ 50 MHz	150	1.10	520
1008LS-272X_B_	2.7 @ 7.9 MHz	10, <b>5</b>	34 @ 50 MHz	135	1.28	490
1008LS-332X_B_	3.3 @ 7.9MHz	10, <b>5</b>	32 @ 50 MHz	120	1.46	450
1008LS-392X_B_	3.9 @ 7.9MHz	10, <b>5</b>	32 @ 7.9 MHz	105	1.56	420
1008LS-472X_B_	4.7 @ 7.9MHz	10, <b>5</b>	31 @ 7.9 MHz	90	1.68	400
1008LS-562X_B_	5.6 @ 7.9MHz	10, <b>5</b>	31 @ 7.9 MHz	80	1.82	380
1008LS-682X_B_	6.8 @ 7.9MHz	10, <b>5</b>	31 @ 7.9 MHz	70	2.00	360
1008LS-822X_B_	8.2 @ 7.9MHz	10, <b>5</b>	23 @ 7.9 MHz	65	2.65	330
1008LS-103X_B_	10.0 @ 7.9MHz	10, <b>5</b>	31 @ 7.9 MHz	60	2.95	300

1. Specify **tolerance** and **packaging** codes:

1008LS-103X**JBC**

**Tolerance:** J = 5% K = 10%

(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).

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

3. Tolerances in bold are stocked for immediate shipment.

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

5. SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D fixture.

6. DCR measured on Cambridge Technology Micro-ohmmeter.

7. Average current for 15°C temperature rise from 25°C.

8. Operating temperature range -40°C to +85°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. Document 224-1 Revised 12/18/02

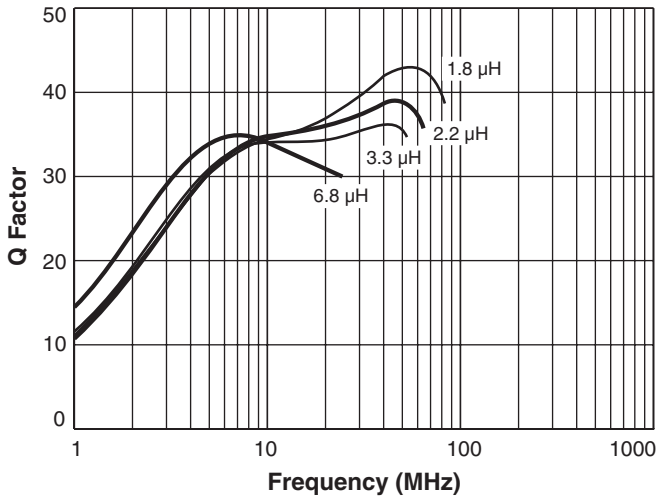
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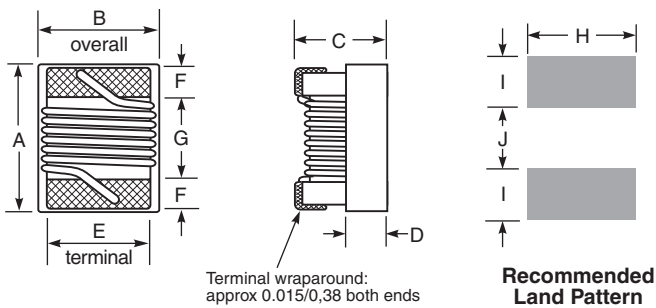
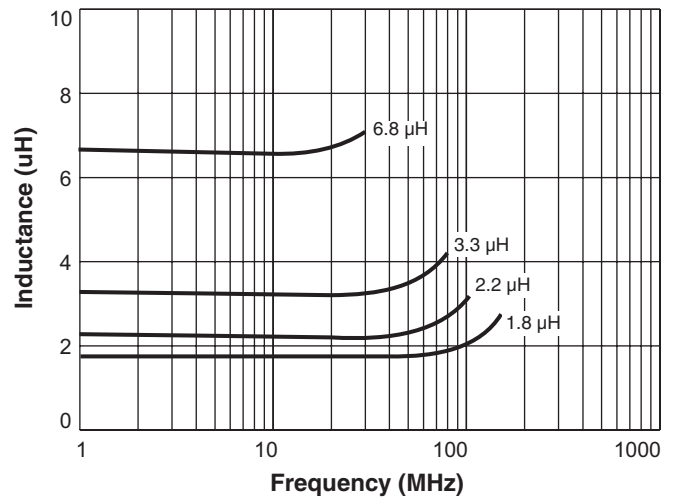
# 1008LS Series (2520)

## Typical Q vs Frequency



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

## Typical L vs Frequency



A max	B max	C max	D ref	E	F	G	H	I	J
0.115	0.110	0.080	0.020	0.080	0.020	0.060	0.100	0.040	0.050
2,92	2,79	2,03	0,51	2,03	0,51	1,52	2,54	1,02	1,27

Parts/reel: 7" 2000; 13" 7500 Tape width: 8 mm  
For packaging data see Tape and Reel Specifications section.



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