



Chip Inductors – 1008LS Series (2520)

- Lower DCR than other 1008 inductors
- Ferrite construction for high current handling
- Inductance values: 1.0 – 10 μ H

Request free evaluation samples by contacting Coilcraft or visiting www.coilcraft.com.

Part number ¹	Inductance ² (μ H)	Percent tolerance	Q min ³	SRF min ⁴ (MHz)	DCR max ⁵ (Ohms)	Irms ⁶ (mA)
1008LS-102XJL_	1.0	5	48 @ 50 MHz	230	0.62	700
1008LS-122XJL_	1.2	5	48 @ 50 MHz	210	0.68	650
1008LS-152XJL_	1.5	5	41 @ 50 MHz	190	0.76	630
1008LS-182XJL_	1.8	5	39 @ 50 MHz	170	0.84	600
1008LS-222XJL_	2.2	5	34 @ 50 MHz	150	1.10	520
1008LS-272XJL_	2.7	5	34 @ 50 MHz	135	1.28	490
1008LS-332XJL_	3.3	5	32 @ 50 MHz	120	1.46	450
1008LS-392XJL_	3.9	5	32 @ 7.9 MHz	105	1.56	420
1008LS-472XJL_	4.7	5	31 @ 7.9 MHz	90	1.68	400
1008LS-562XJL_	5.6	5	31 @ 7.9 MHz	80	1.82	380
1008LS-682XJL_	6.8	5	31 @ 7.9 MHz	70	2.00	360
1008LS-822XJL_	8.2	5	23 @ 7.9 MHz	65	2.65	330
1008LS-103XJL_	10	5	31 @ 7.9 MHz	60	2.95	300

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

1008LS-103XJL C

Termination: L = RoHS compliant silver-palladium-platinum-glass frit.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or
S = non-RoHS tin-lead (63/37).

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 at 7.9 MHz using Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
- Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
- SRF measured using an Agilent/HP 8753D network analyzer with a Coilcraft SMD-D fixture.
- DCR measured on a Cambridge Technology Micro-ohmmeter.
- Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate.
- Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

For part marking data see Color Coding section.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Designer's Kit C336 contains 10 of each value

Core material Ceramic/Ferrite

Terminations RoHS compliant silver-palladium-platinum-glass frit.
Other terminations available at additional cost.

Weight 38.3 – 41.0 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to
+100°C with derated current

Storage temperature Component: –40°C to +100°C.
Packaging: –55°C to +80°C

Resistance to soldering heat Max three 40 second reflows at
+260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +100 to +350 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C/
85% relative humidity)

Mean Time Between Failures (MTBF) 1 billion hours

Packaging 2000/7" reel; 7500/13" reel. Plastic tape: 8 mm wide,
0.3 mm thick, 4 mm pocket spacing, 2.0 mm pocket depth

PCB washing Only pure water or alcohol recommended

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX **TEST FIXTURES**

Coilcraft[®]

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

Document 103-1 Revised 09/27/07

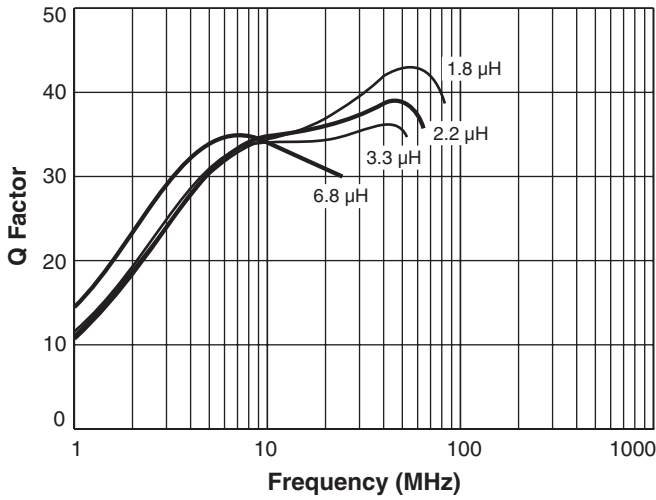
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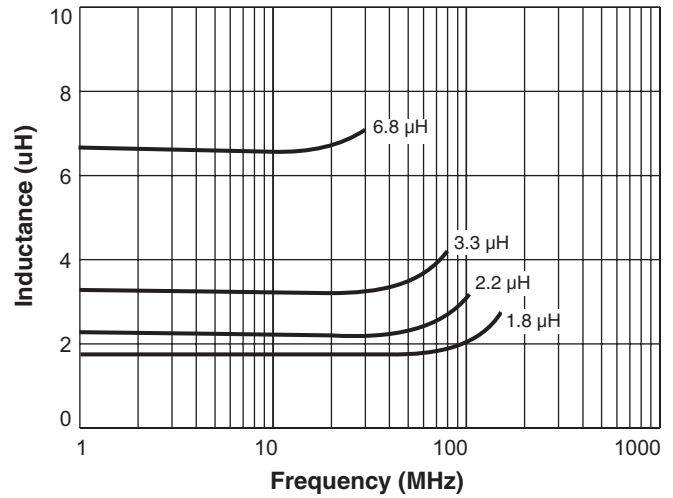
1008LS Series (2520)

Typical Q vs Frequency

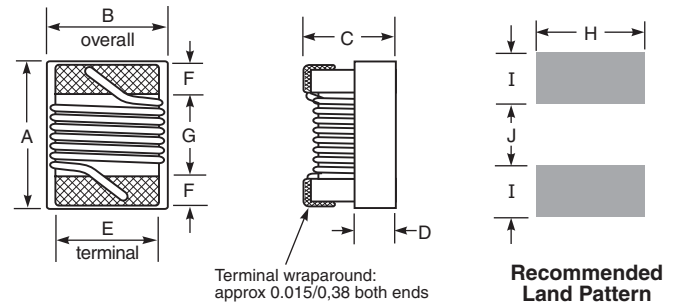
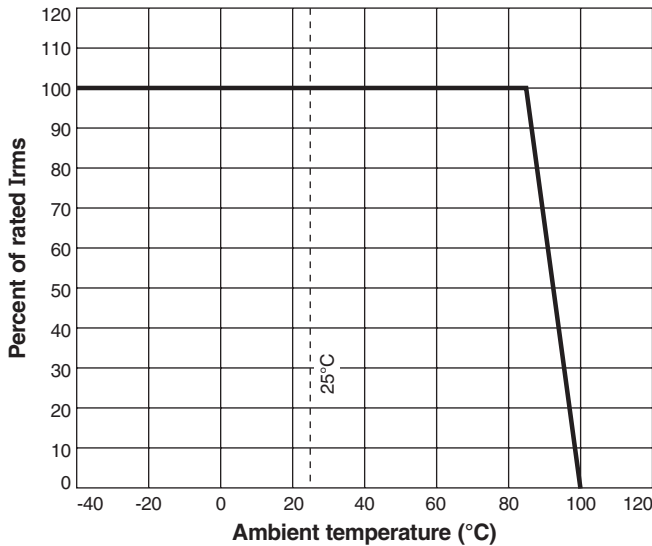


S-Parameter files
ON OUR WEB SITE OR CD
SPICE models
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Typical L vs Frequency



Irms Derating



A	B	C	D	E	F	G	H	I	J
max	max	max	ref						
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



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