



Chip Inductors – 1008AF (2520)

- Lowest DCR and highest current rating of our 1008 size inductors
- Available in 14 inductance values from 0.9 to 10 μ H.

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

Part number ¹	Inductance ² (μ H)	Percent tolerance ³	Q typ ⁴	SRF min ⁵ (MHz)	DCR max ⁶ (Ohms)	Isat ⁷ (A)	Irms ⁸ (A)
1008AF-901X_L_	0.9	10, 5	25	415	0.100	1.4	1.3
1008AF-112X_L_	1.1	10, 5	24	376	0.105	1.3	1.2
1008AF-132X_L_	1.3	10, 5	37	198	0.110	1.2	1.1
1008AF-152X_L_	1.5	10, 5	22	135	0.125	1.1	1.0
1008AF-192X_L_	1.9	10, 5	29	126	0.140	1.0	1.0
1008AF-222X_L_	2.2	10, 5	21	106	0.155	0.95	0.95
1008AF-272X_L_	2.7	10, 5	22	70	0.190	0.80	0.90
1008AF-332X_L_	3.3	10, 5	21	59	0.210	0.75	0.80
1008AF-392X_L_	3.9	10, 5	21	55	0.220	0.70	0.80
1008AF-472X_L_	4.7	10, 5	27	48	0.435	0.70	0.65
1008AF-582X_L_	5.8	10, 5	21	37	0.280	0.55	0.75
1008AF-682X_L_	6.8	10, 5	20	33	0.315	0.50	0.70
1008AF-822X_L_	8.2	10, 5	20	34	0.395	0.50	0.65
1008AF-103X_L_	10.0	10, 5	22	26	0.480	0.45	0.55

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

1008AF-103XJLC

- Tolerance:** J = 5% K = 10%
(Table shows stock tolerances in bold.)
- 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).

2. Inductance measured at 2.5 MHz using 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 at 2.5 MHz using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
5. SRF measured using an Agilent/HP 8753D network analyzer with a Coilcraft SMD-D fixture.
6. DCR measured on a Cambridge Technology Micro-ohmmeter.
7. DC current at which the inductance drops 10% (typ.) from its value without current.
8. Current that causes a 40°C temperature rise from 25°C ambient.
9. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.
For part marking data, visit <http://www.coilcraft.com/colrcode.cfm>.

Designer's Kit C414 contains 10 of each 5% value

Core material Ferrite

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

Weight 28 – 33 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°C.
Packaging: –40°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 2000 per 7" reel; 7500 per 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



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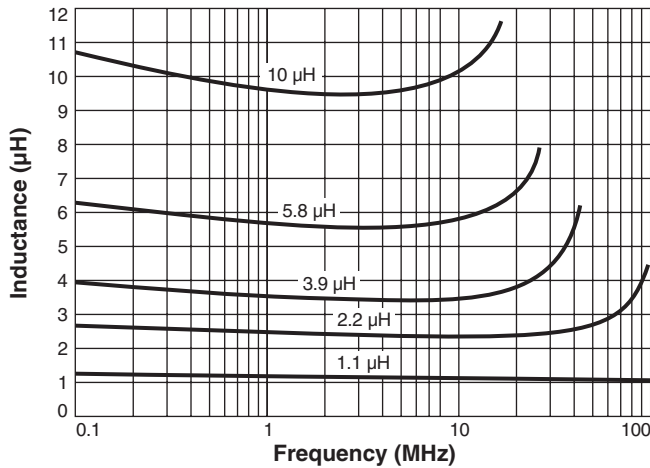
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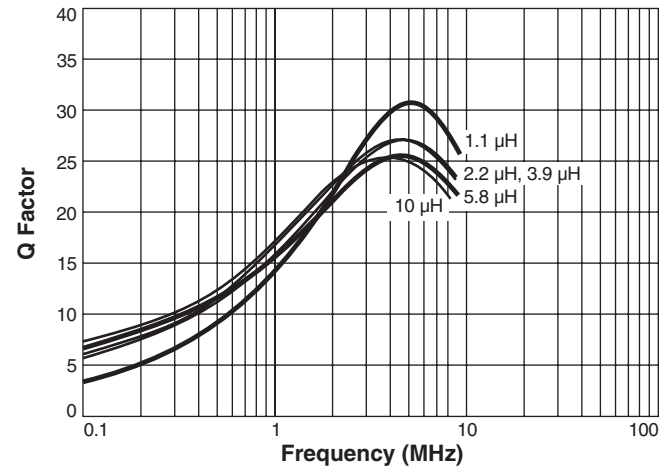


1008AF Series (2520)

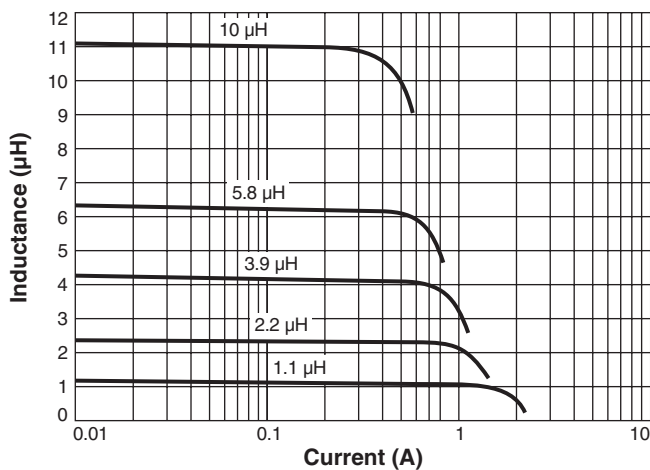
Typical L vs Frequency



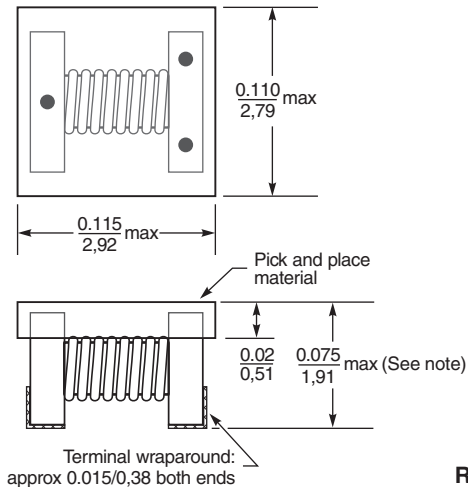
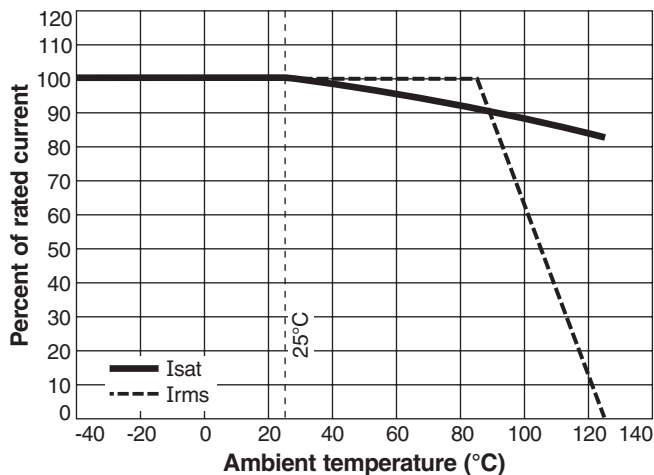
Typical Q vs Frequency



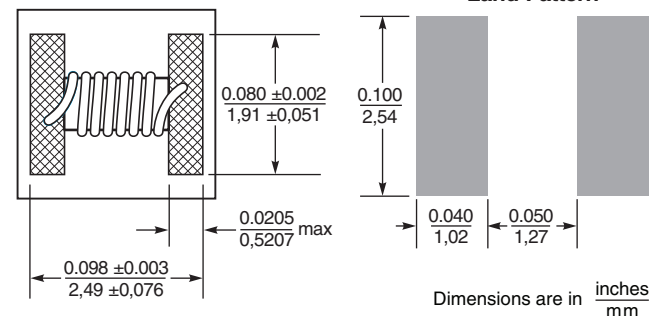
Typical L vs Current



Typical Current Derating



Recommended Land Pattern



Note: Height dimension is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0.152 mm.



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