

**NEW!**

Chip Inductors – 1008AF Series (2520)

- Lowest DCR and highest current rating of our 1008 size inductors
- Available in 14 inductance values from 0.9 to 10 μH , all at 10% tolerance.

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

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

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

1008AF-103XKL **L 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).

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. Q measured at 2.5 MHz using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.

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

5. DCR measured on a Cambridge Technology Micro-ohmmeter.

6. DC current at which the inductance drops 10% (typ.) from its value without current.

7. Current that causes a 40°C temperature rise from 25°C ambient.

8. Electrical specifications at 25°C.

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

For part marking data, see Color Coding section.

Designer's Kit C414 contains 10 of each 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)

Mean Time Between Failures (MTBF) One billion hours

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

Coilcraft®

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

Document 578-1 Revised 10/06/08

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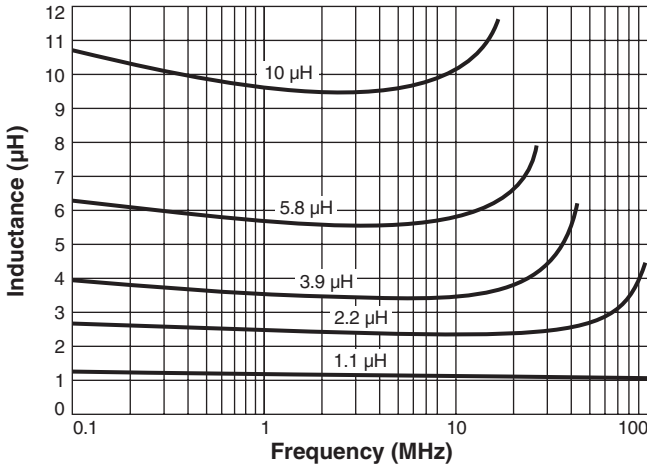
COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX **TEST FIXTURES**



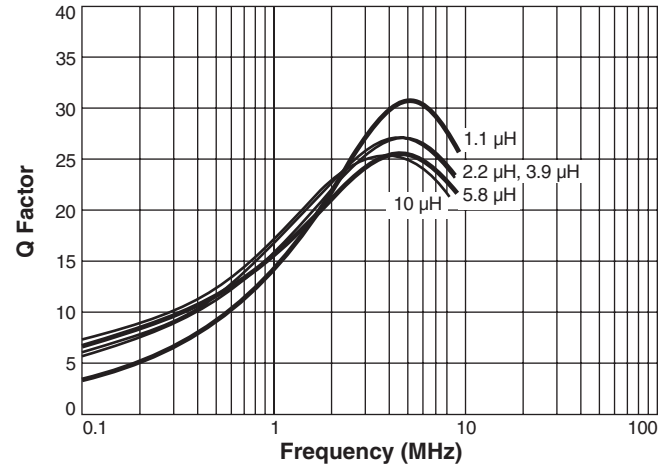
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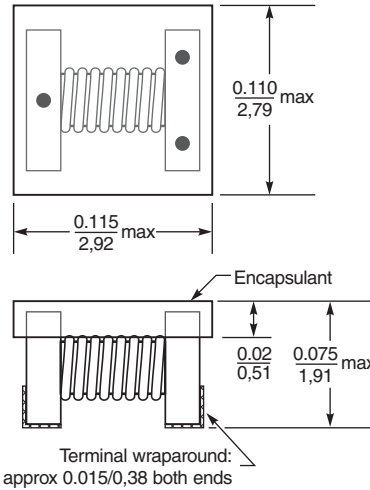
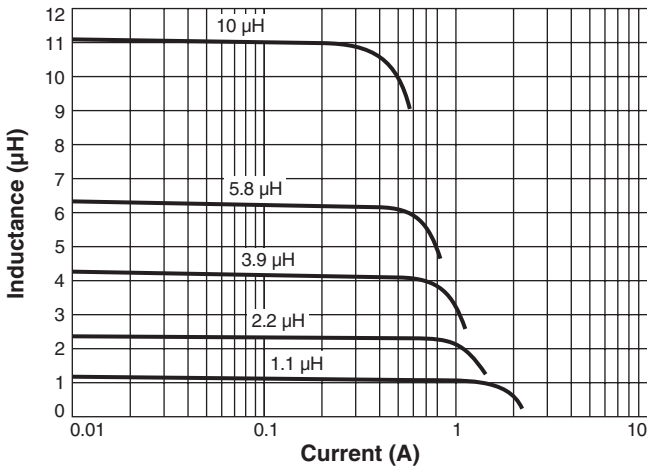
Typical L vs Frequency



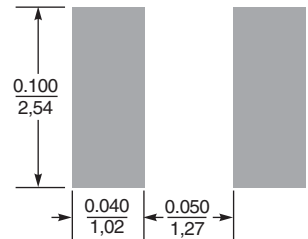
Typical Q vs Frequency



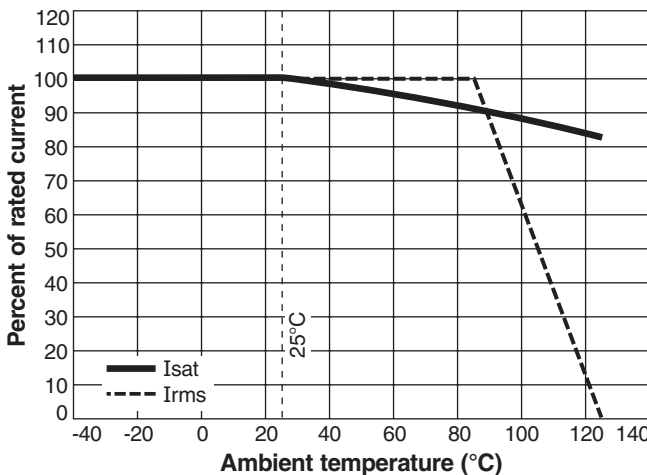
Typical L vs Current



Recommended Land Pattern



Typical Current Derating



Dimensions are in inches/mm



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Document 578-2 Revised 10/06/08

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