



Maxi Spring™ Air Core Inductors



- Air core inductors feature higher Q, L and current ratings
- Rigid package provides a flat surface for pick and place
- Leads are locked in position for precise terminal spacing

Weight 0.42 – 0.59 g

Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Ambient temperature –40°C to +125°C with I_{rms} current, +125°C to +140°C with derated current

Storage temperature Component: –40°C to +140°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) +5 to +70 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 800/13" reel Plastic tape: 24 mm wide, 0.3 mm thick, 12 mm pocket spacing, 6.1 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Turns	Inductance ² (nH)	Percent tolerance ³	Q ² typ	Q ² min	Test freq. (MHz)	SRF min ⁴ (GHz)	DCR max ⁵ (mOhm)	I _{rms} ⁶ (A)
132-09SM_L_	9	90	5,2	114	95	50	1.140	15	3.5
132-10SM_L_	10	111	5,2	104	87	50	1.020	15	3.5
132-11SM_L_	11	130	5,2	104	87	50	0.900	20	3.0
132-12SM_L_	12	169	5,2	114	95	50	0.875	25	3.0
132-13SM_L_	13	206	5,2	114	95	50	0.800	30	3.0
132-14SM_L_	14	222	5,2	110	92	50	0.730	35	3.0
132-15SM_L_	15	246	5,2	114	95	50	0.685	35	3.0
132-16SM_L_	16	307	5,2	114	95	50	0.660	35	3.0
132-17SM_L_	17	380	5,2	114	95	50	0.590	50	2.5
132-18SM_L_	18	422	5,2	114	95	50	0.540	60	2.5
132-19SM_L_	19	491	5,2	114	95	50	0.535	65	2.0
132-20SM_L_	20	538	5,2	104	87	50	0.490	90	2.0

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

132-20SM G L D

Termination: L = RoHS compliant tin-silver (96.5/3.5) over copper.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or
S = non-RoHS tin-lead (63/37).

Tolerance: G = 2% J = 5%

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (800 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 D instead.

2. Inductance and Q tested on the Agilent/HP 4291A with the 16193 fixture and correlation.

3. Tolerances in bold are stocked for immediate shipment.

4. SRF tested on the Agilent/HP 8753D and the SMD-D test fixture.

5. DCR tested on the Cambridge Technology Model 510 Micro Ohmmeter.

6. Current that causes a 15°C temperature rise from 25°C ambient.

7. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

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

S-Parameter files
ON OUR WEB SITE OR CD

SPICE models
ON OUR WEB SITE OR CD

Coilcraft®

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

Document 185-1 Revised 10/29/08

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

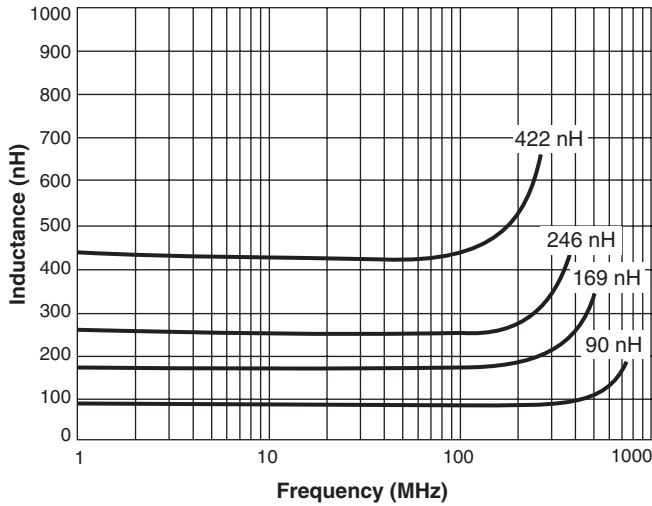
E-mail info@coilcraft.com Web <http://www.coilcraft.com>



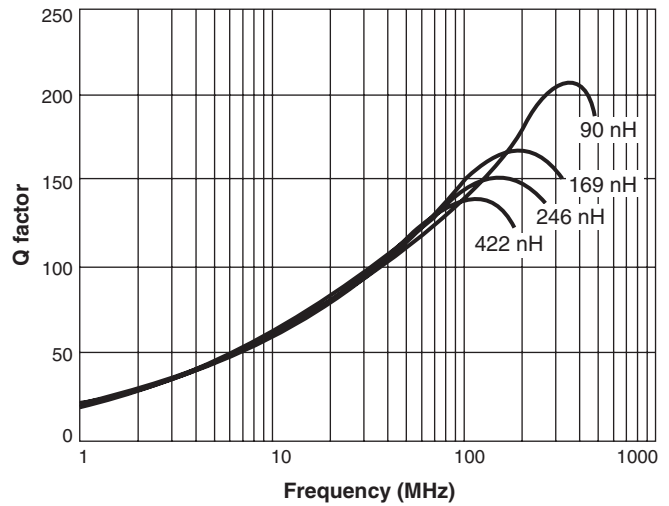
Maxi Spring™ Air Core Inductors

Designer's Kit C319 contains 8 each of all 5% values.
 Designer's Kit C319-2 contains 8 each of all 2% values.

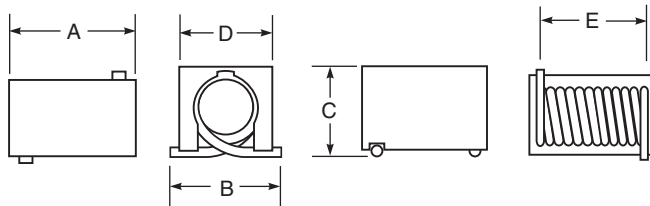
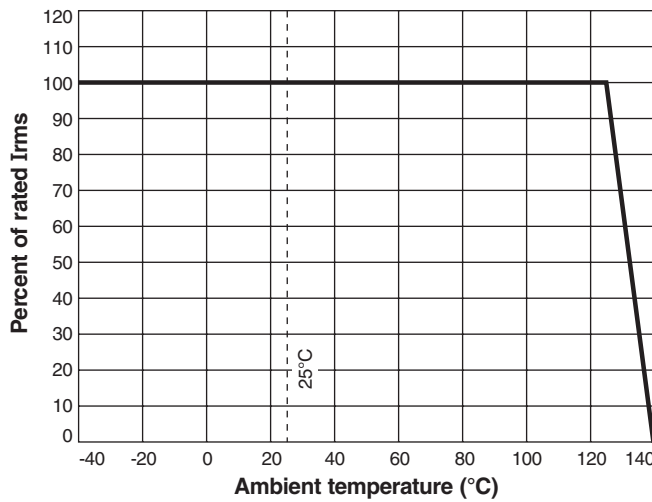
Typical L vs Frequency



Typical Q vs Frequency

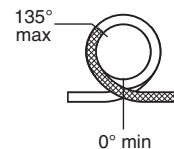


Typical Irms Derating



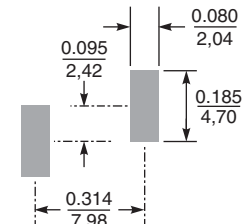
A max	B max	C max	D	E
0.415	0.260	0.235	0.226 ±0.003	0.314 ±0.020
10,55	6,60	5,97	5,74 ±0,08	7,98 ±0,51

Strip Length



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern



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

Document 185-2 Revised 10/29/08

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web http://www.coilcraft.com