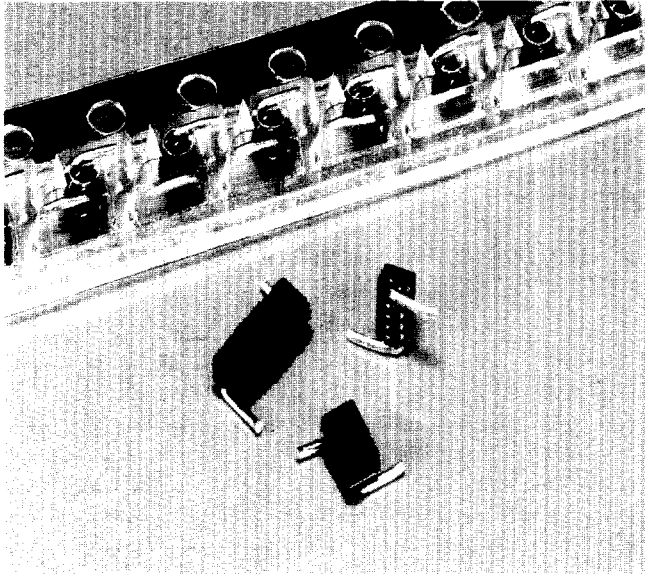


# "Micro Spring" Air Core Inductors



The world's smallest surface mount air core inductors, these components provide exceptionally high Q over a wide range of frequencies.

They feature tight inductance tolerance and thermal stability which can often eliminate the need for circuit tuning.

Coilcraft's "micro spring" inductors are tape and reel packaged and have an acrylic jacket with a flat top, making them suitable for automatic placement and reflow or vapor phase processing. The leads are tinned to assure reliable soldering.

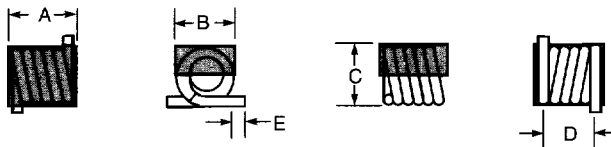
**Designer's Kit C108** contains samples of all the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

## Specifications

Part Number <sup>1</sup>	Turns	Inductance <sup>2</sup> (nH)	Percent Tolerance <sup>3</sup>	Q <sup>4</sup> Min	Test Freq. (MHz)	SRF <sup>5</sup> Min (GHz)	DCR <sup>6</sup> Max (mOhm)	I <sub>DC</sub> <sup>7</sup> Max (A)
0906-2_	2	1.65	<b>10</b>	100	800	10.0	4.0	1.6
0906-3_	3	2.55	<b>10,5</b>	100	800	8.2	5.0	1.6
0906-4_	4	3.85	<b>10,5,2</b>	100	800	7.5	6.0	1.6
0906-5_	5	5.45	<b>5,2</b>	100	800	7.0	8.0	1.6
1606-6_	6	5.60	<b>5,2</b>	100	800	6.5	9.0	1.6
1606-7_	7	7.15	<b>5,2</b>	100	800	6.0	10	1.6
1606-8_	8	8.80	<b>5,2</b>	100	800	6.0	12	1.6
1606-9_	9	9.85	<b>5,2</b>	100	800	5.2	13	1.6
1606-10_	10	12.55	<b>5,2</b>	100	800	4.6	14	1.6

For environmental data see "Spring Inductors—Product Specifications" (Document 182).

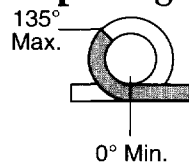
- When ordering, please add letter to specify inductance tolerance: **G**=2%, **J**=5%, **K**=10%.
- Inductance measured using HP4286 with Coilcraft SMD-A fixture and correlation.
- Tolerances in bold are stocked for immediate shipment.
- Q measured using HP4291A with HP16193A test fixture.
- SRF measured using HP8753D with Coilcraft SMD-D test fixture.
- DCR tested on the Cambridge Technology Model 510 Micro-ohmmeter.
- For 15°C temperature rise.
- Operating temperature range -40°C to +125°C.
- Electrical specifications at 25°C.



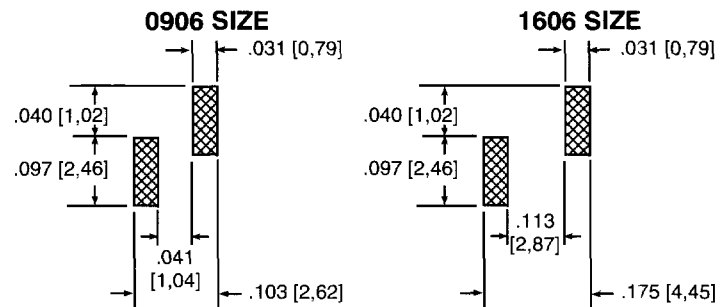
Size	A	B	C	D	E
0906	.087 ± .010	.056 ± .005	.054 ± .006	.072 ± .010	.035 ± .010
	2.21 ± 0.25	1.42 ± 0.13	1.37 ± 0.15	1.83 ± 0.25	0.89 ± 0.25
1606	.159 ± .012	.056 ± .005	.054 ± .006	.144 ± .012	.035 ± .010
	4.04 ± 0.30	1.42 ± 0.13	1.37 ± 0.15	3.66 ± 0.30	0.89 ± 0.25

**COILCRAFT** ACCURATE  
REPEATABLE  
**PRECISION** MEASUREMENTS  
PAGE 147 **TEST FIXTURES**

## Strip Length



## Typical Land Patterns



Parts/reel: 7" 2,000; 13" 7,500  
Tape width: 8 mm

Parts/reel: 7" 2,000; 13" 7,500  
Tape width: 12 mm

For packaging data see "Tape and Reel Specifications" (Document 173)

**Coilcraft**

Specifications subject to change without notice. Document 163-1 Revised 2/5/99

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

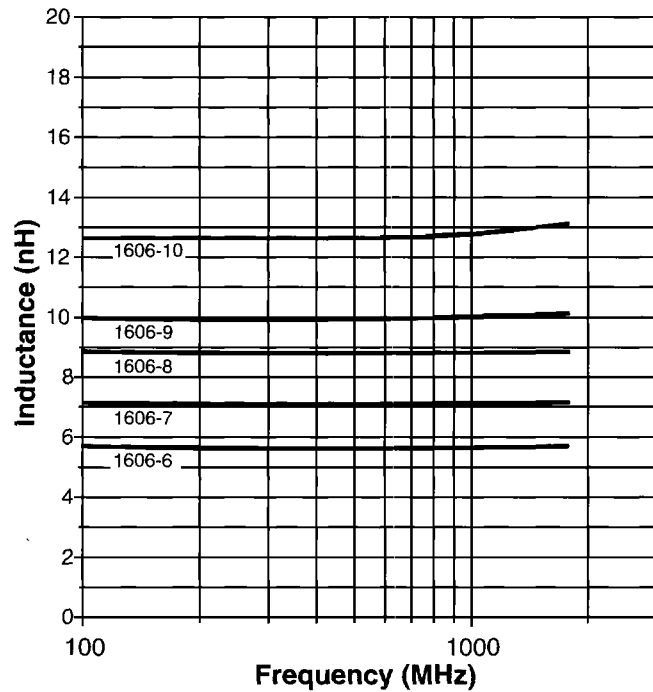
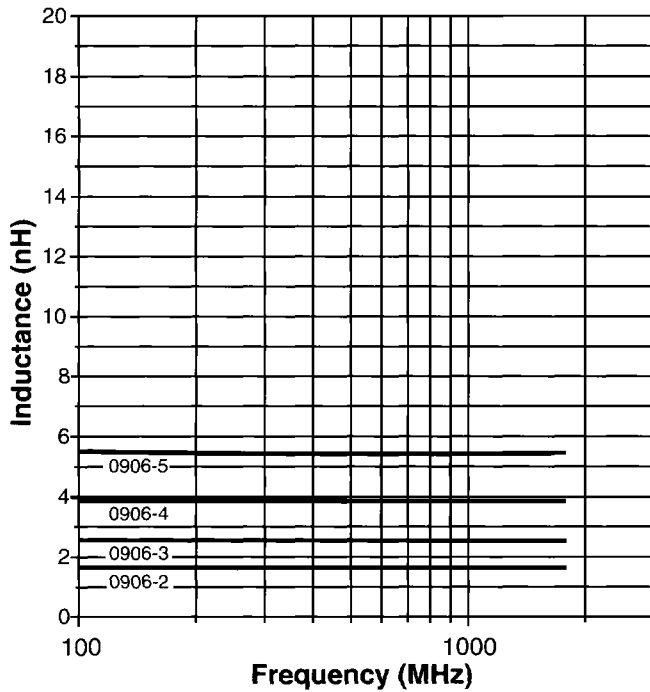
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Data by Fax 800/651-6974 Web <http://www.coilcraft.com>

This datasheet has been downloaded from <http://www.digchip.com> at this page

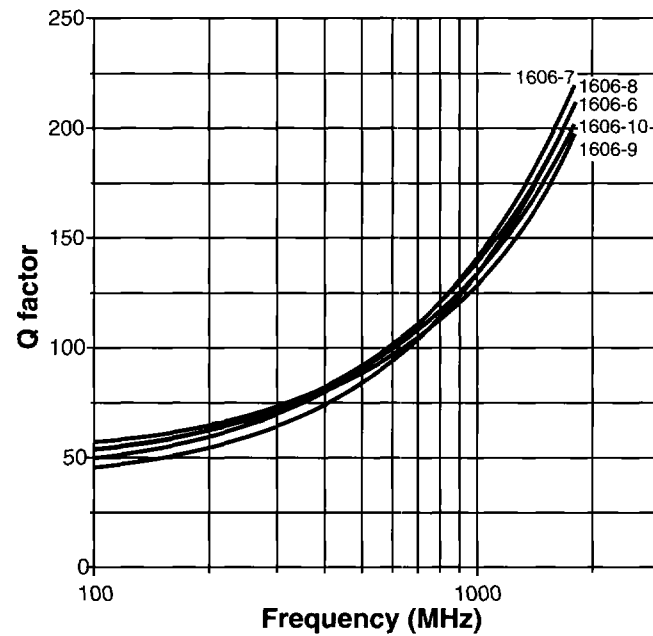
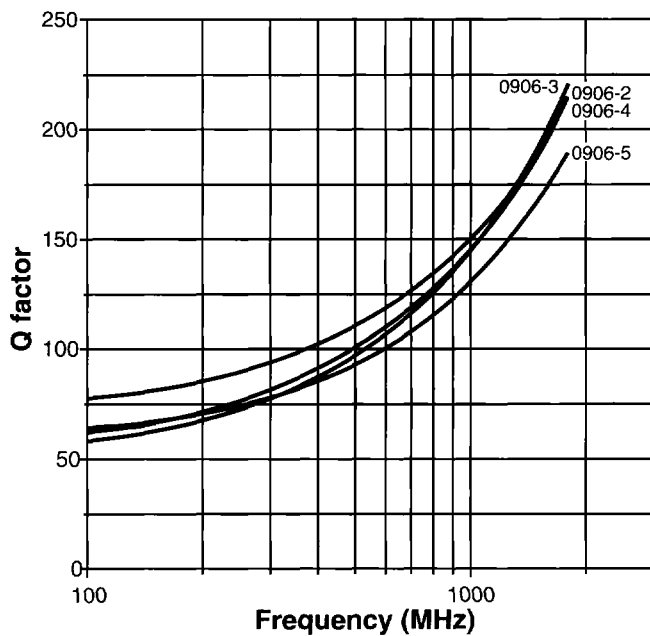
# "Micro Spring" Air Core Inductors

**S-Parameter files**  
ON OUR WEB SITE OR CD  
**PSPICE models**  
SEE PAGE 149

## Typical L vs Frequency



## Typical Q vs Frequency



*Coilcraft*

Specifications subject to change without notice. Document 163-2 Revised 5/19/99

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail info@coilcraft.com Data by Fax 800/651-6974 Web <http://www.coilcraft.com>