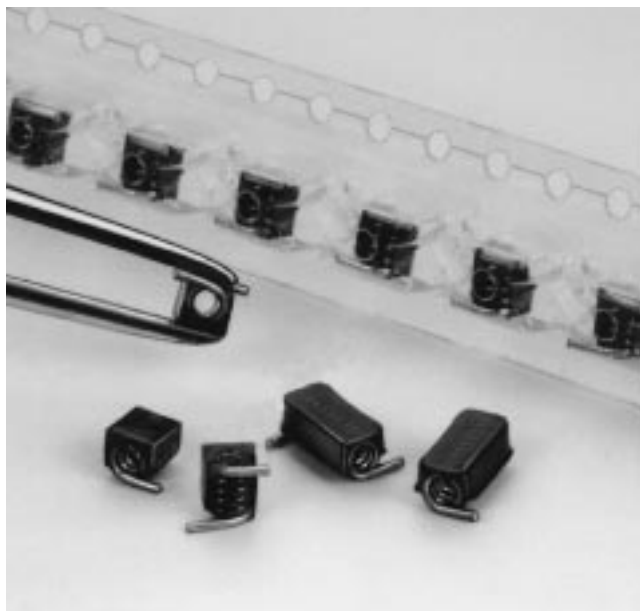


# Mini Spring™ Air Core Inductors



These surface mount air core “spring” inductors provide extremely high Q over a wide frequency range.

They're jacketed with a high temperature material which assures mechanical stability and very close tolerance. It also forms a flat top, making them suitable for automatic placement and reflow or vapor phase processing. Tinned leads assure reliable soldering.

Coilcraft Mini Spring™ inductors are available in standard EIA tape and reel packaging: 12 mm for size A, and 16 mm for size B parts.

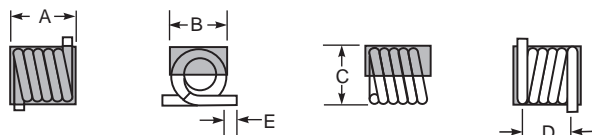
**Designer's Kit C102** contains samples of all 5% inductance tolerance parts. Kits with 2% tolerance are also available. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

## 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)
A01T_	1	2.5	<b>10</b>	145	150	12.5	1.1	4
A02T_	2	5.0	<b>10,5</b>	140	150	6.5	1.8	4
A03T_	3	8.0	<b>5,2</b>	140	150	5.0	2.6	4
A04T_	4	12.5	<b>5,2</b>	137	150	3.3	3.4	4
A05T_	5	18.5	<b>5,2</b>	132	150	2.5	3.9	4
B06T_	6	17.5	<b>5,2</b>	100	150	2.2	4.5	4
B07T_	7	22.0	<b>5,2</b>	102	150	2.1	5.2	4
B08T_	8	28.0	<b>5,2</b>	105	150	1.8	6.0	4
B09T_	9	35.5	<b>5,2</b>	112	150	1.5	6.8	4
B10T_	10	43.0	<b>5,2</b>	106	150	1.2	7.9	4

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

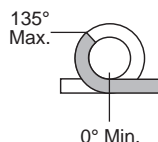
- When ordering, please add number to specify inductance tolerance: **G=2%, J=5%, K=10%**.
- Inductance measured using HP4286 with Coilcraft SMD-A fixture and correlation.
- Tolerances in bold are stocked for immediate shipment.
- Q measured using HP4291A with HP16193A test fixture.
- SRF measured using HP8720D with Coilcraft SMD-D test fixture.
- DCR tested on the Cambridge Technology Model 510 Micro-ohmmeter.
- For 15° C temperature rise.
- Operating temperature -40° C to +125° C.
- Electrical specifications at 25° C.



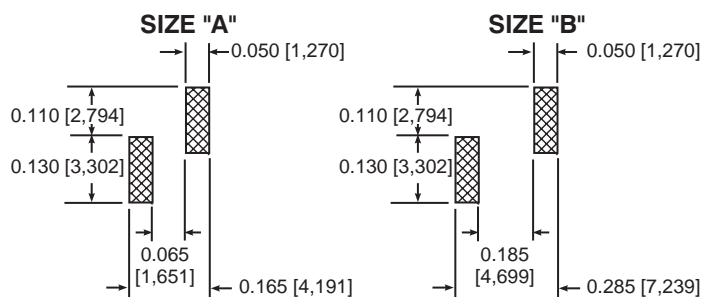
Size	A	B	C	D	E
A	.145 3.68	.120 3.05	.125 3.18	.115 ± .010 2.92 ± 0.25	.023 ± .015 0.58 ± 0.38
B	.270 6.86	.120 3.05	.125 3.18	.230 ± .015 5.84 ± 0.25	.023 ± .015 0.58 ± 0.38

**COILCRAFT** ACCURATE REPEATABLE  
**PRECISION** MEASUREMENTS  
DOC. 126 **TEST FIXTURES**

## Strip Length



## Typical Land Patterns



Parts/reel: 7" 700; 13" 2,500  
Tape width: 12 mm

Parts/reel: 7" 500; 13" 2,200  
Tape width: 16 mm

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

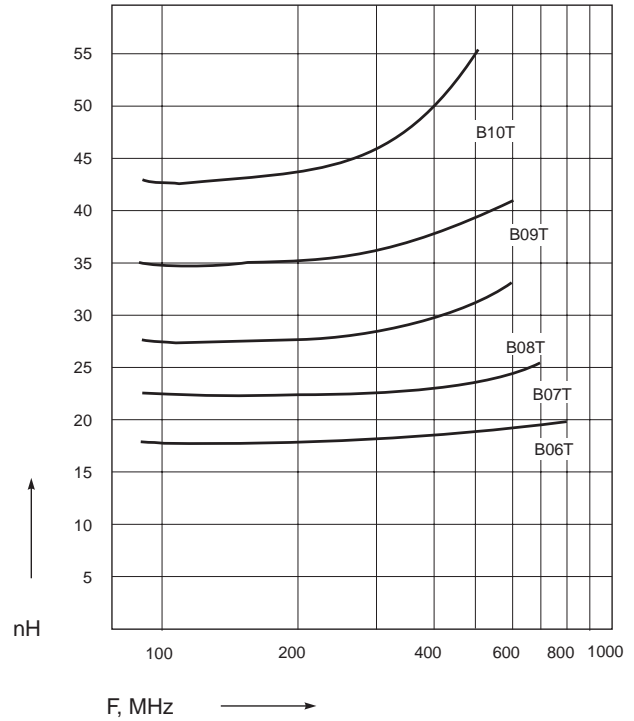
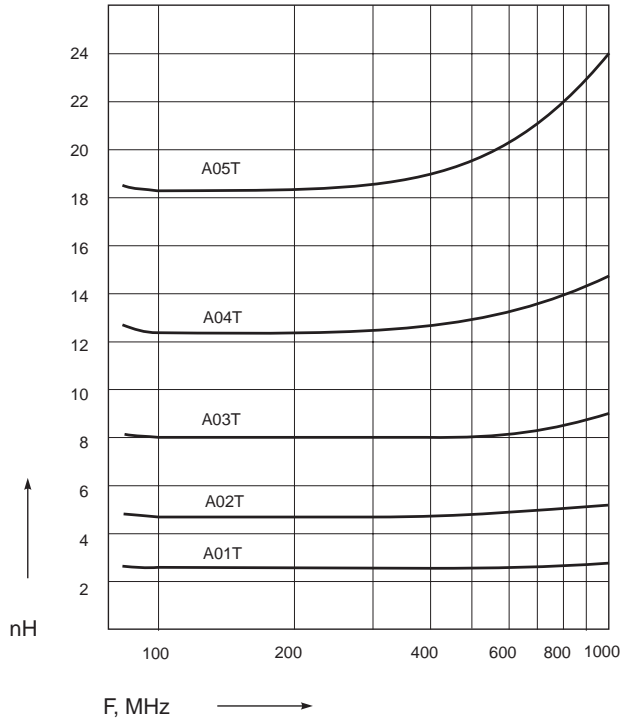


Specifications subject to change without notice. Document 107-1 Revised 9/27/00

# Mini Spring™ Air Core Inductors

**S-Parameter files**  
ON OUR WEB SITE OR CD  
**PSPICE models**  
SEE DOC 158

## Typical L vs Frequency



## Typical Q vs Frequency

