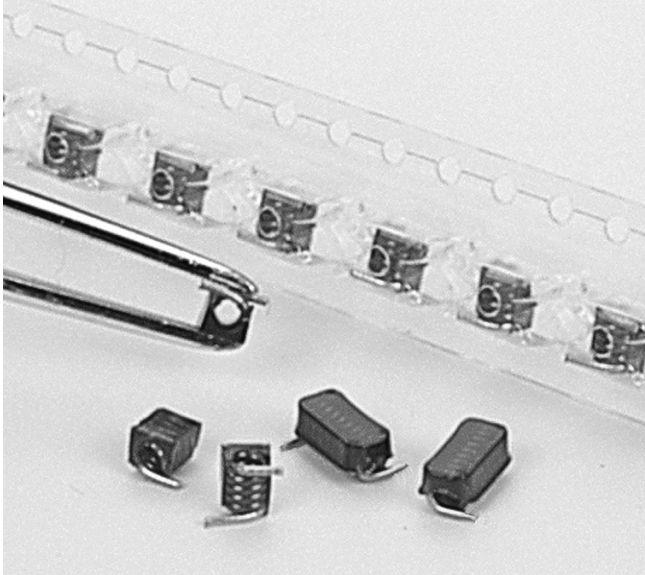




Mini Spring™ Air Core Inductors



- Small air core inductors feature high Q and tight tolerances
- Acrylic jacket provides a flat top for pick and place
- Solder coated leads ensure reliable soldering

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

Ambient temperature -40°C to +125°C with Irms current, +125°C to +140°C with derated current

Storage temperature Component: -40°C to +140°C.
Tape and reel 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 A0xT: 700/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.32 mm thick, 8 mm pocket spacing, 3.3 mm pocket depth
BxxT: 500/7" reel; 2200/13" reel Plastic tape: 16 mm wide, 0.28 mm thick, 8 mm pocket spacing, 3.4 mm pocket depth

Recommended pick and place nozzle: OD: 0.110"; ID: 0.091"

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Turns	L ² (nH)	Percent tol ³	Q ⁴ min	SRF min ⁵ (GHz)	DCR max ⁶ (mOhm)	Irms ⁷ (A)	Weight (mg)
A01TKL_	1	2.5	10	145	12.5	1.1	4	31
A02T_L_	2	5.0	5,2,1	140	6.5	1.8	4	42
A03T_L_	3	8.0	5,2,1	140	5.0	2.6	4	52
A04T_L_	4	12.5	5,2,1	137	3.3	3.4	4	65
A05T_L_	5	18.5	5,2,1	132	2.5	3.9	4	78
B06T_L_	6	17.5	5,2,1	100	2.2	4.5	4	100
B07T_L_	7	22.0	5,2,1	102	2.1	5.2	4	110
B08T_L_	8	28.0	5,2,1	105	1.8	6.0	4	118
B09T_L_	9	35.5	5,2,1	112	1.5	6.8	4	133
B10T_L_	10	43.0	5,2,1	106	1.2	7.9	4	147

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

A02TGLC

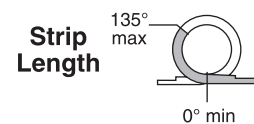
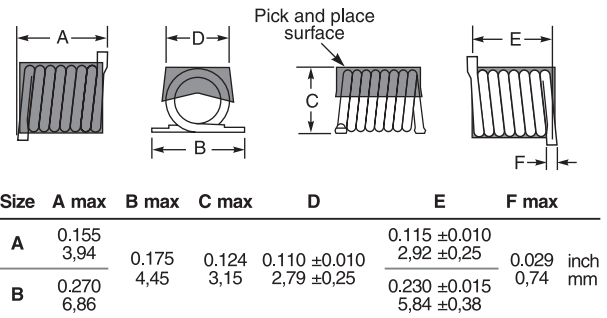
Tolerance: F = 1% G = 2% J = 5% K = 10% (Table shows stock tolerances in bold.)

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).

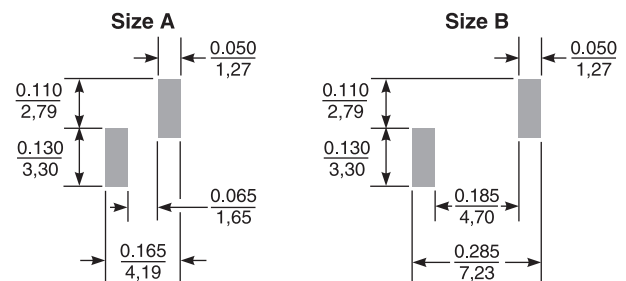
Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape, 700 (AxxT) or 500 (BxxT) parts per full reel.
B = Less than full reel. In tape, but not machine-ready. To have a leader and trailer added (\$25 charge), use code letter C instead.
D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked, 2500 (AxxT) or 2200 (BxxT) parts per full reel.

- Inductance measured at 150 MHz with an Agilent/HP 4286 or equivalent, a Coilcraft SMD-A and correlation.
- Tolerances in bold are stocked for immediate shipment.
- Q measured at 150 MHz using an Agilent/HP 4291A with an Agilent/HP 16193A test fixture or equivalents.
- SRF tested on an Agilent/HP 8720D or equivalent and a Coilcraft SMD-D fixture.
- DCR tested on the Cambridge Technology Model Micro-ohmmeter or equivalent.
- Current that causes a 15°C temperature rise from 25°C ambient.
- Electrical specifications at 25°C.

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



Recommended Land Patterns



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



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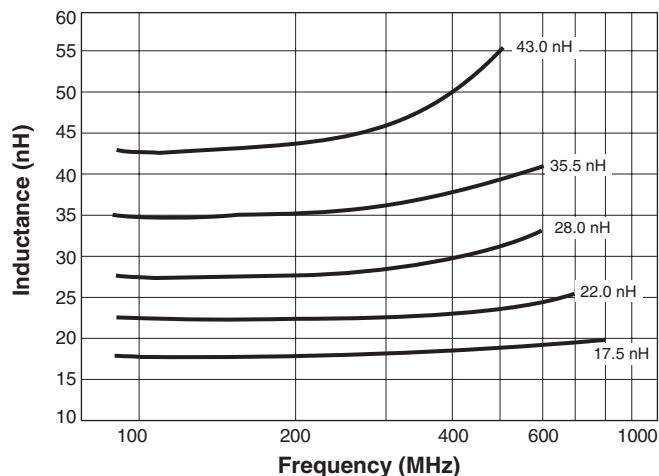
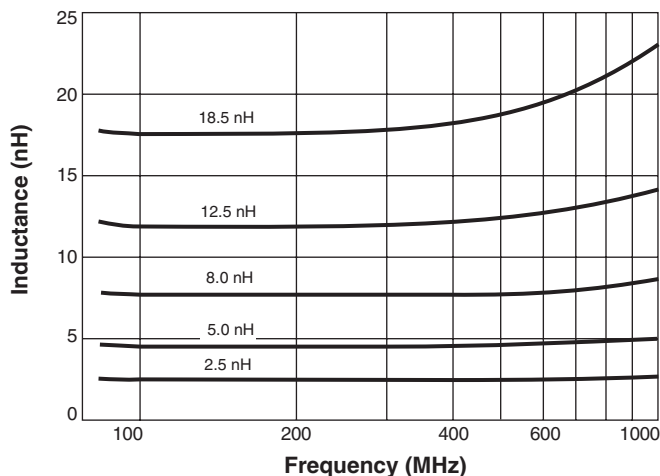
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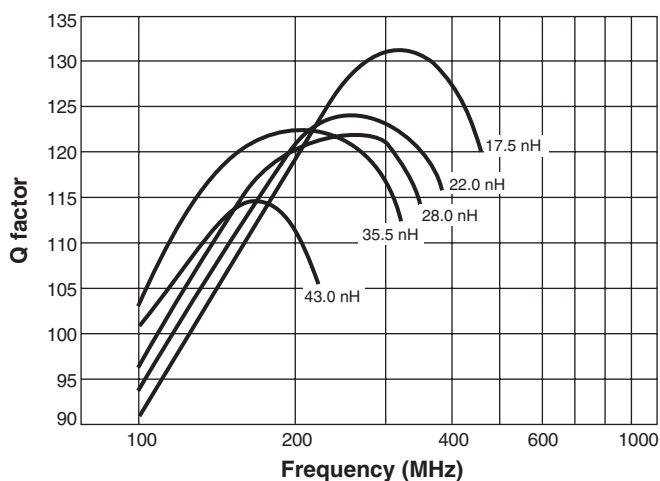
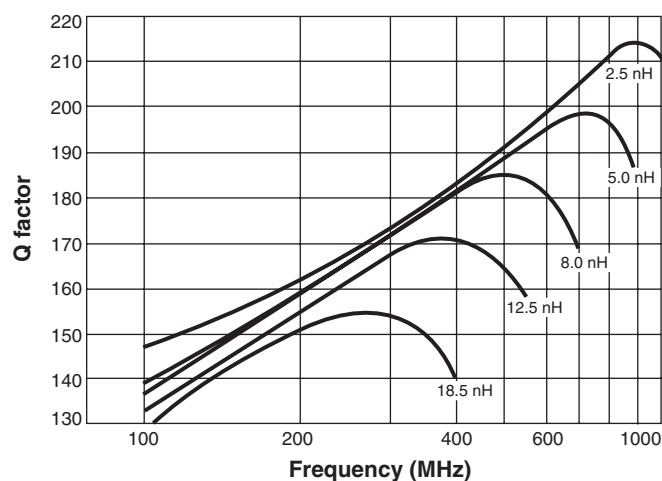


Mini Spring™ Air Core Inductors

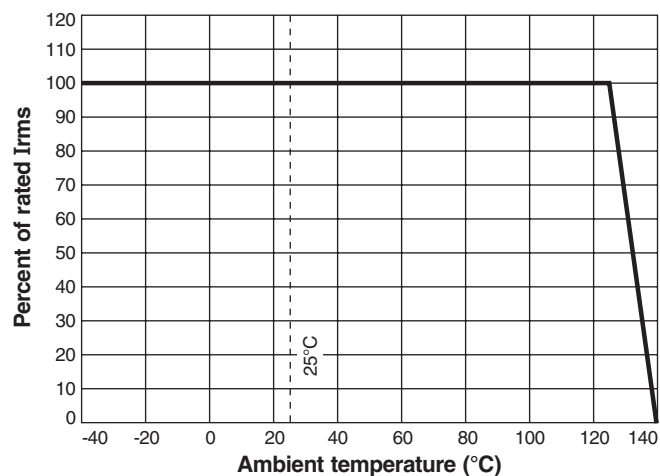
Typical L vs Frequency



Typical Q vs Frequency



Typical Irms Derating



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