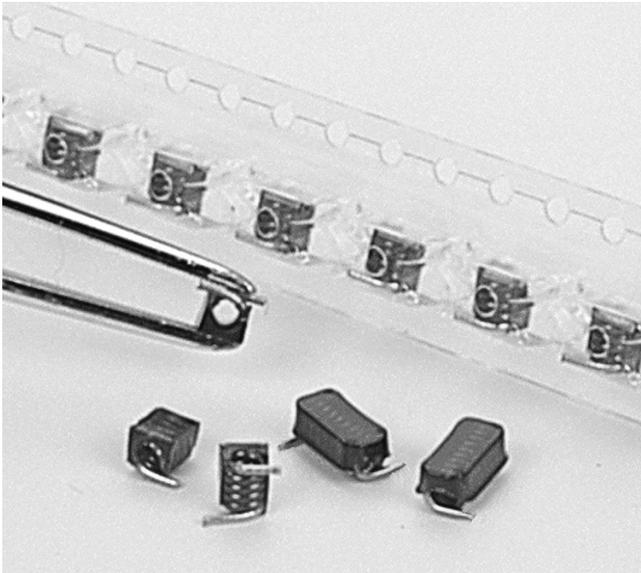


Mini Spring™ Air Core Inductors



- 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,

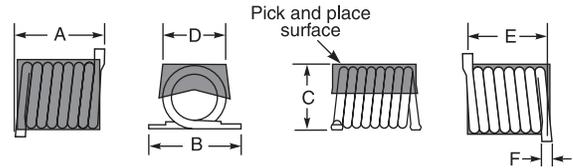
0.32 mm thick, 8 mm pocket spacing, 3.3 mm pocket depth

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

PCB washing Tested with pure water or alcohol only. For other solvents, 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 |



| Size | A max | B max | C max | D | E | F max |
|----------|---------------|-------|-------|--------------|----------------------------|---------------|
| A | 0.155 3,94 | 0.175 | 0.124 | 0.110 ±0.010 | 0.115 ±0.010 2,92 ±0,25 | 0.029 inch |
| B | 0.270 6,86 | 4,45 | 3,15 | 2,79 ±0,25 | 0.230 ±0.015 5,84 ±0,38 | 0,74 mm |

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

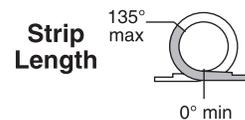
A02TGLC

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

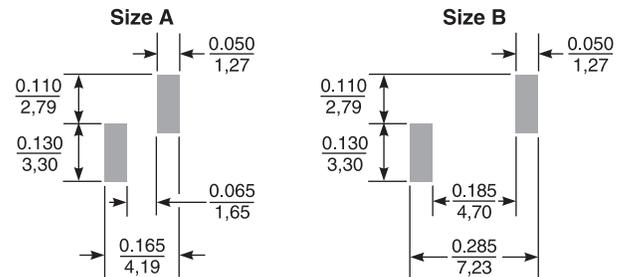
Termination: L = RoHS compliant tin-silver (96.5/3.5) over copper. Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

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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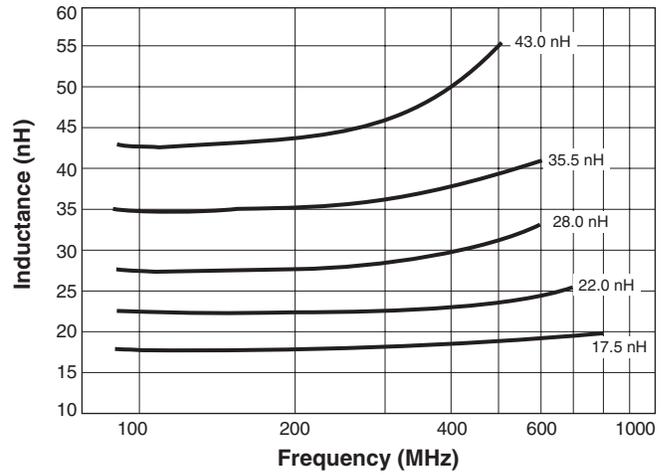
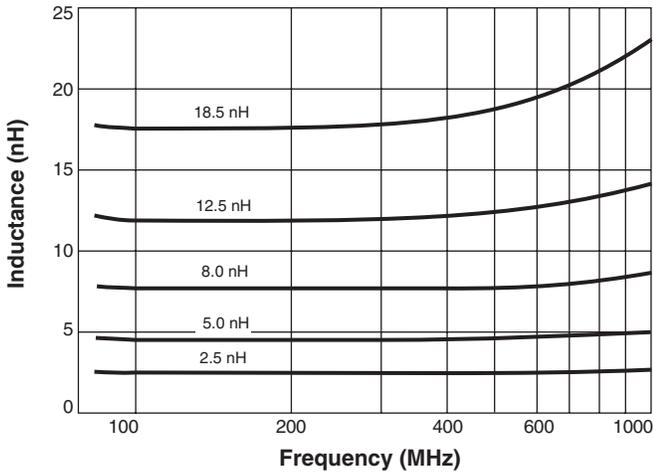
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 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

Designer's Kit C302 contains 12 each of all 5% values
 Designer's Kit C302-2 contains 12 each of all 2% values

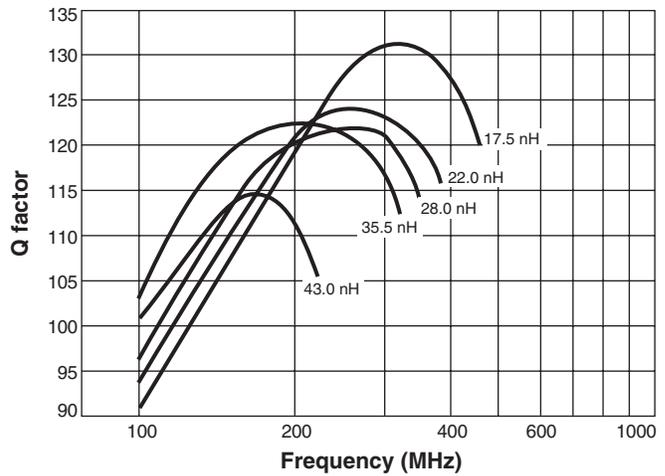
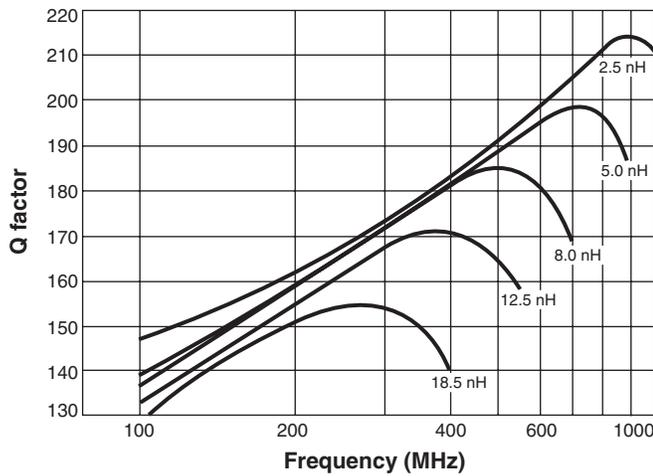


Mini Spring™ Air Core Inductors

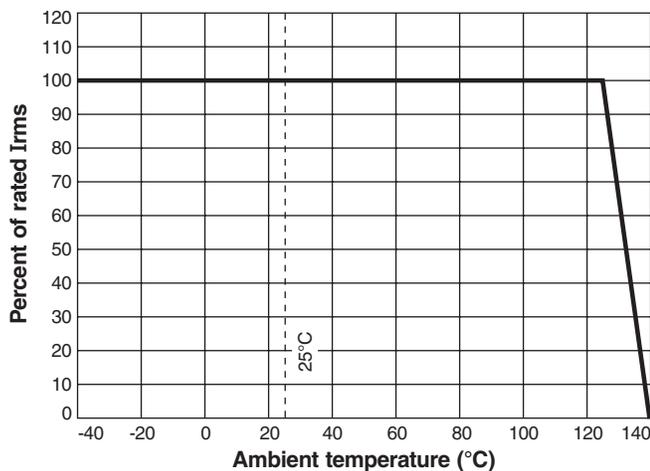
Typical L vs Frequency



Typical Q vs Frequency



Typical Irms Derating



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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