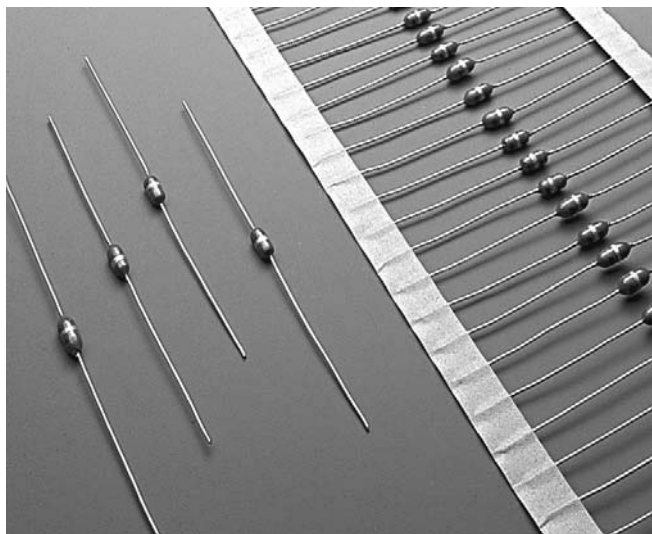


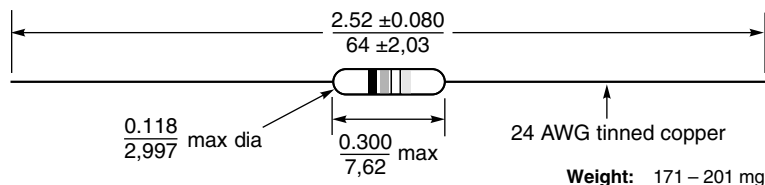
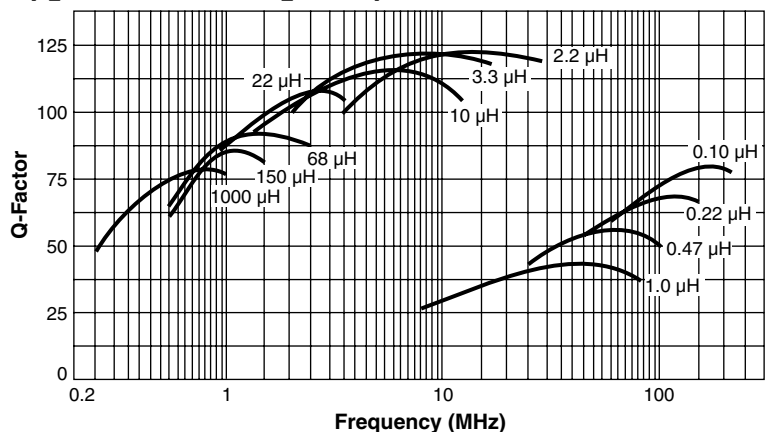
Axial Lead Chokes – 90 Series



Coilcraft's axial lead chokes are totally encapsulated in a durable epoxy coating. Their low cost compared to molded type chokes makes them particularly attractive to high volume users. Coilcraft chokes are available in the standard values listed here as well as in custom values to meet your specific requirements.

Coilcraft **Designer's Kit No. F102** contains samples of 25 standard parts (all odd-numbered values). To order, please contact Coilcraft or visit <http://order.coilcraft.com>.

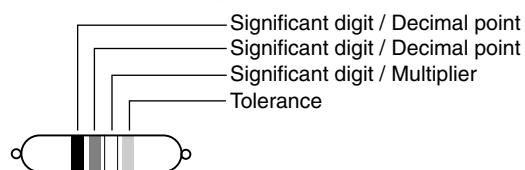
Typical Q vs Frequency



Features

- No molding stress to break wire
- 10% inductance tolerance standard, 5% available
- Temperature coefficient compatible with N030-N080 capacitors through part number 90-30
- Standard EIA color coding
- Significant savings for high volume users
- Available bulk packed in conventional tape and reel or "ammo packs." Custom lead forming also available
- Offered in 49 standard values or in custom values

Color Coding – Inductance in µH



| | |
|------------|-------------------------|
| Black = 0 | Violet = 7 |
| Brown = 1 | Gray = 8 |
| Red = 2 | White = 9 |
| Orange = 3 | Gold = Decimal point |
| Yellow = 4 | |
| Green = 5 | Tolerance: Silver = 10% |
| Blue = 6 | Gold = 5% |

Notes:
 A gold stripe in the 1st or 2nd location represents a decimal point. When a decimal point is used, there is no multiplier.
 The inductance value indicated is in microHenries.



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

Document 115-1 Revised 08/19/03

Axial Lead Chokes – 90 Series

| Part number ¹ | Inductance ² ±10% (µH) | Q ³ min | Test freq (MHz) | DCR max (Ohms) | SRF min (MHz) | Irms ⁴ (mA) | Core material |
|--------------------------|--------------------------------------|-----------------------|--------------------|-------------------|------------------|---------------------------|------------------|
| 90-01 | 0.10 | 38 | 25 | 0.08 | 680 | 1380 | Phenolic |
| 90-02 | 0.12 | 38 | 25 | 0.09 | 640 | 1300 | Phenolic |
| 90-03 | 0.15 | 38 | 25 | 0.11 | 600 | 1230 | Phenolic |
| 90-04 | 0.18 | 35 | 25 | 0.12 | 550 | 1120 | Phenolic |
| 90-05 | 0.22 | 33 | 25 | 0.14 | 510 | 1040 | Phenolic |
| 90-06 | 0.27 | 33 | 25 | 0.16 | 460 | 975 | Phenolic |
| 90-07 | 0.33 | 30 | 25 | 0.22 | 410 | 830 | Phenolic |
| 90-08 | 0.39 | 30 | 25 | 0.30 | 365 | 710 | Phenolic |
| 90-09 | 0.47 | 30 | 25 | 0.35 | 330 | 660 | Phenolic |
| 90-10 | 0.56 | 30 | 25 | 0.50 | 310 | 550 | Phenolic |
| 90-11 | 0.68 | 28 | 25 | 0.60 | 280 | 500 | Phenolic |
| 90-12 | 0.82 | 28 | 25 | 0.85 | 260 | 420 | Phenolic |
| 90-13 | 1.0 | 25 | 25 | 1.00 | 240 | 390 | Phenolic |
| 90-14 | 1.2 | 60 | 7.9 | 0.15 | 150 | 620 | Ferrite |
| 90-15 | 1.5 | 60 | 7.9 | 0.16 | 140 | 560 | Ferrite |
| 90-16 | 1.8 | 60 | 7.9 | 0.20 | 125 | 480 | Ferrite |
| 90-17 | 2.2 | 60 | 7.9 | 0.29 | 115 | 415 | Ferrite |
| 90-18 | 2.7 | 50 | 7.9 | 0.40 | 100 | 355 | Ferrite |
| 90-19 | 3.3 | 50 | 7.9 | 0.42 | 90 | 285 | Ferrite |
| 90-20 | 3.9 | 50 | 7.9 | 0.60 | 80 | 263 | Ferrite |
| 90-21 | 4.7 | 40 | 7.9 | 0.66 | 60 | 239 | Ferrite |
| 90-22 | 5.6 | 40 | 7.9 | 0.70 | 45 | 195 | Ferrite |
| 90-23 | 6.8 | 40 | 7.9 | 0.90 | 40 | 185 | Ferrite |
| 90-24 | 8.2 | 40 | 7.9 | 1.00 | 28 | 160 | Ferrite |
| 90-25 | 10 | 35 | 7.9 | 1.10 | 24 | 144 | Ferrite |
| 90-26 | 12 | 60 | 2.5 | 1.62 | 20 | 160 | Ferrite |
| 90-27 | 15 | 60 | 2.5 | 1.75 | 17 | 157 | Ferrite |
| 90-28 | 18 | 60 | 2.5 | 1.85 | 16 | 149 | Ferrite |
| 90-29 | 22 | 50 | 2.5 | 2.0 | 14 | 144 | Ferrite |
| 90-30 | 27 | 50 | 2.5 | 2.1 | 12 | 140 | Ferrite |
| 90-31 | 33 | 50 | 2.5 | 2.2 | 10 | 130 | Ferrite |
| 90-32 | 39 | 50 | 2.5 | 2.3 | 9.5 | 125 | Ferrite |
| 90-33 | 47 | 50 | 2.5 | 2.4 | 9.0 | 110 | Ferrite |
| 90-34 | 56 | 50 | 2.5 | 3.0 | 7.8 | 100 | Ferrite |
| 90-35 | 68 | 50 | 2.5 | 3.4 | 7.0 | 92 | Ferrite |
| 90-36 | 82 | 50 | 2.5 | 3.8 | 6.7 | 88 | Ferrite |
| 90-37 | 100 | 50 | 2.5 | 4.1 | 6.1 | 84 | Ferrite |
| 90-38 | 120 | 60 | 0.79 | 6.5 | 4.8 | 66 | Ferrite |
| 90-39 | 150 | 60 | 0.79 | 8.3 | 4.1 | 61 | Ferrite |
| 90-40 | 180 | 60 | 0.79 | 8.9 | 4.0 | 57 | Ferrite |
| 90-41 | 220 | 60 | 0.79 | 10.1 | 3.6 | 52 | Ferrite |
| 90-42 | 270 | 60 | 0.79 | 11.0 | 3.3 | 47 | Ferrite |
| 90-43 | 330 | 60 | 0.79 | 12.4 | 3.1 | 45 | Ferrite |
| 90-44 | 390 | 60 | 0.79 | 13.6 | 2.9 | 40 | Ferrite |
| 90-45 | 470 | 60 | 0.79 | 18.4 | 2.4 | 36 | Ferrite |
| 90-46 | 560 | 60 | 0.79 | 20.3 | 2.2 | 35 | Ferrite |
| 90-47 | 680 | 60 | 0.79 | 22.3 | 2.0 | 30 | Ferrite |
| 90-48 | 820 | 60 | 0.79 | 25.0 | 1.9 | 29 | Ferrite |
| 90-49 | 1000 | 60 | 0.79 | 27.4 | 1.8 | 28 | Ferrite |

- 5% tolerance part available as special order. Add -5 to end of the part number: e.g. 90-49-5.
- Inductance measured with a Coilcraft AXL-A test fixture and Agilent/HP 4192/4286 Impedance Analyzers.
- Q measured on Agilent/HP 4192/4286 with AXL-A, direct-connected to Agilent/HP 4342 Q-Meter.
- Temperature rise at rated current and 90°C ambient
0.10 – 1.0 µH: 35°C
1.2 – 1000 µH: 15°C

- Operating temperature range
0.10 – 1.0 µH: –40°C to +125°C
1.2 – 1000 µH: –40°C to +105°C
- Electrical specifications at 25°C.
- Color coding per MIL-C-15305C
- Epoxy coating: flame resistant 94 VO
- Designed to meet requirements of Military Specifications MS75083, MS75084 and MS75085.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE INDEX **TEST FIXTURES**

Coilcraft®

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

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