

Rod Core Chokes (RCC)

FASTRON's Rod Core Choke series consists of the most common inductance values. They come in different core sizes, currents, and are designed as a single layer coil. Rated current up to 10A, high mechanical stability, high saturation currents and custom designs on request

Applications Noise suppression coil for Brush-Collector Motors, for Automotive and many industrial Applications, able to carry AC-Line voltage, HF Filter, for Attenuation circuit and storage Inductor in Converters, switching regulators, SMPS-power supplies and broadband filtering.

Technical Data

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| L – Value (rated inductance) | Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency f _L |
| DCR (max) | Measured at 25 °C |
| Rated DC Current | I based on temperature rise, determined at the point where the temperature rise does not exceed 15°C above the ambient temperature of 25°C |
| Operating Temperature | -55 to 125°C (includes component self-heating) |
| Recommended soldering method | Wave |
| Solderability | Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta) |
| Resistance to Soldering Heat | Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb) |
| Resistance to Solvent | Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45 |
| Climatic Test | Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days |
| Thermal Shock Test | Temperature cycle : -55°C to +125°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G |
| Coil on Core strength | Core withstand a two times-test pressing force of 15N for 1 minute at room temperature (25°C). |

Ordering Code Example: **3RCC-1R8M-00**

3 RCC 1R8 M 00
(Case Size)(Core Type) - (Inductance Value)(Tolerance) - (Packing Code)

- Case Size
- Core diameter 3 and 3,3mm, 4mm, 5mm, 6mm
- Core Type
- Ferrite-Rod bar
- Tolerances
- M (20%)
- Packing Code
- 00 (loose packing in box)