

# EMI Suppression Beads

## (2643002402)

Part Number: 2643002402

43 SHIELD BEAD

### Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade
- Last digit 1 = Not Burnished 2 = Burnished
- The last digit of the Parylene coated part is a "4," which is available upon request. The minimum coating thickness beads is 0.005 mm (0.0002").

Fair-Rite offers a broad selection of ferrite EMI suppression beads with guaranteed minimum impedance specifications.

Our "Shield Bead Kit" (part number 0199000019) contains a selection of these beads.

**For any EMI suppression bead requirement not listed here, feel free to contact our customer service for availability and pricing.**

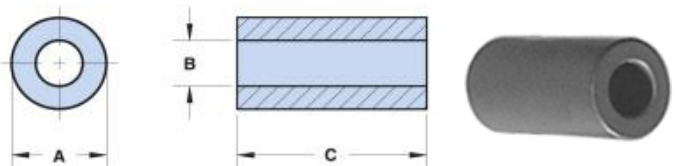
[Catalog Drawing](#)

[3D Model](#)

The C dimension, the bead length, can be modified to suit specific applications.

Weight: 1.1 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 9.65 | ±0.25  | 0.38         | —          |
| B   | 5    | ±0.20  | 0.197        | —          |
| C   | 5.05 | -0.45  | 0.19         | —          |



### Chart Legend

+ Test frequency

- The column "H (Oe)" gives for each bead the calculated dc bias field in oersted for 1 turn and 1 ampere direct current. The actual dc H field in the application is this value of "H" times the actual

NI (ampere-turn) product. For the effect of the dc bias on the impedance of the bead material, see figures 18-23 in the application note “How to choose Ferrite Components for EMI Suppression”.

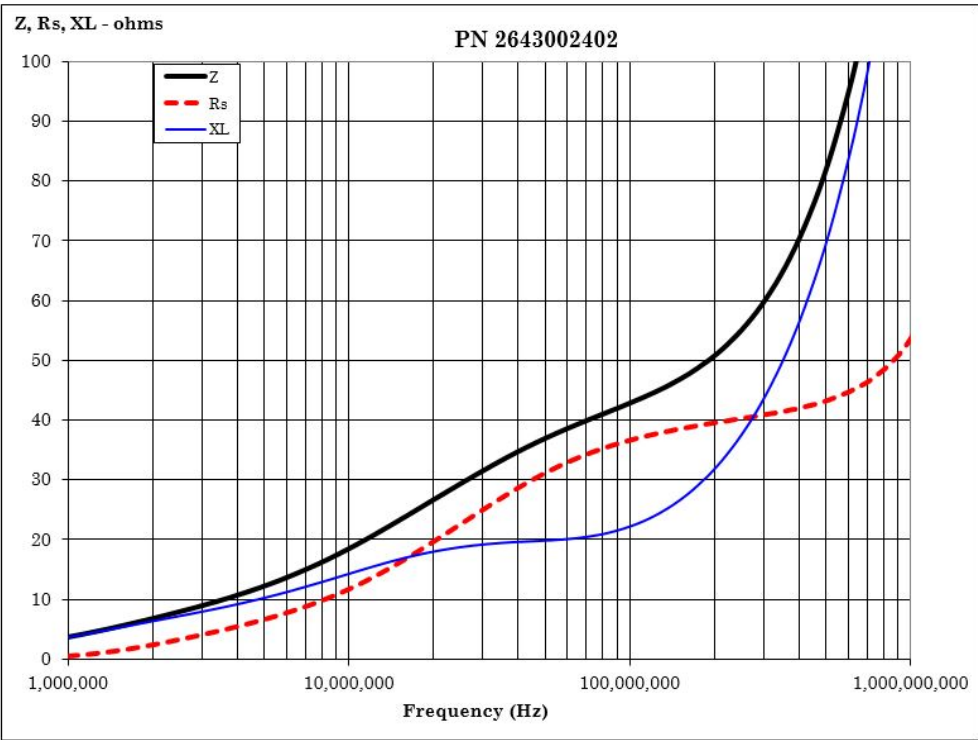
| Typical Impedance (Ω) |      |
|-----------------------|------|
| 10 MHz                | 18   |
| 25 MHz <sup>+</sup>   | 29   |
| 100 MHz <sup>+</sup>  | 42   |
| 250 MHz               | 55   |
| Electrical Properties |      |
| H(Oe)                 | 0.59 |

Suppression beads are controlled for impedances only. Minimum impedance values are specified for the + marked frequencies. The minimum impedance is typically the listed impedance less 20%.

[Catalog Drawing](#)

Single turn impedance tests for 73 and 43 material® beads are performed on the E4990A Impedance Analyzer. The 61 material beads are tested on the E4991A / HP4291B Impedance Analyzer. Beads are tested with the shortest practical wire length.

| Typical Impedance (Ω) |    |
|-----------------------|----|
| 10 MHz                | 16 |
| 25 MHz <sup>+</sup>   | 26 |
| 100 MHz <sup>+</sup>  | 43 |
| 250 MHz               | 56 |



[CSV Download](#)

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