

# EMI Suppression Beads (2643002201)



Part Number: 2643002201

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.

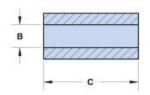
## Catalog Drawing 3D Model

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

Weight: 0.08 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 1.95 | -0.20  | 0.073        | _          |
| В   | 1.05 | +0.10  | 0.043        | _          |
| С   | 10.4 | ±0.25  | 0.409        | _          |







#### **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[].

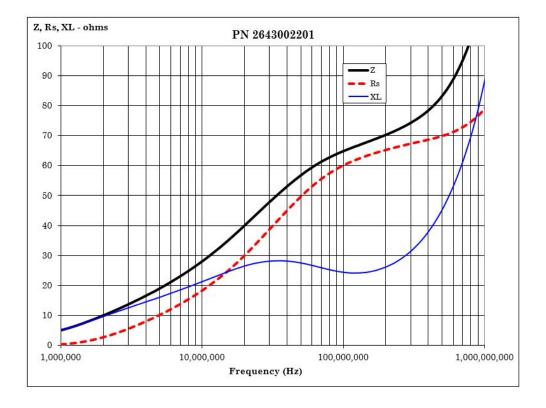
| Typical Impedance (Ω) |    |  |  |  |
|-----------------------|----|--|--|--|
| 10 MHz                | 27 |  |  |  |
| 25 MHz <sup>+</sup>   | 42 |  |  |  |
| 100 MHz <sup>+</sup>  | 61 |  |  |  |
| 250 MHz               | 64 |  |  |  |
| Electrical Properties |    |  |  |  |
| H(Oe)                 |    |  |  |  |

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 Impendance $(Ω)$ |    |  |  |  |  |
|--------------------------|----|--|--|--|--|
| 10 MHz                   | 26 |  |  |  |  |
| 25 MHz <sup>+</sup>      | 34 |  |  |  |  |
| 100 MHz <sup>+</sup>     | 58 |  |  |  |  |
| 250 MHz                  | 77 |  |  |  |  |



#### **CSV** Download

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