

# EMI Suppression Beads (2643022401)



Part Number: 2643022401

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  $0.005 \text{ mm} (0.0002^{\circ})$ .

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.

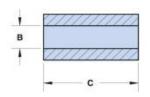
Catalog Drawing
3D Model

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

Weight: 0.38 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 5.1  | ±0.25  | 0.201        |            |
| В   | 1.45 | +0.25  | 0.062        | _          |
| С   | 6.35 | ±0.25  | 0.25         | _          |







## **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☐.

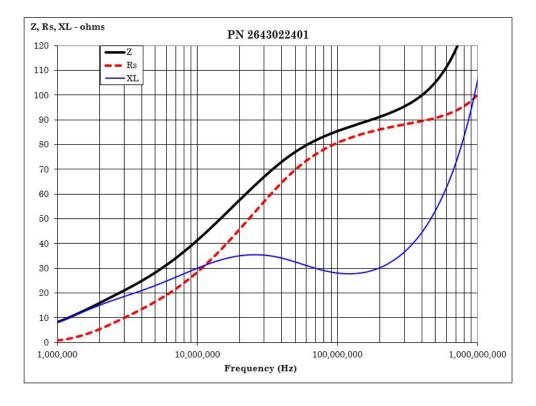
| Typical Impedance (Ω  |     |  |  |  |
|-----------------------|-----|--|--|--|
| 10 MHz                | 41  |  |  |  |
| 25 MHz <sup>+</sup>   | 63  |  |  |  |
| 100 MHz <sup>+</sup>  | 85  |  |  |  |
| 250 MHz               | 93  |  |  |  |
| Electrical Properties |     |  |  |  |
| H(Oe)                 | 1.5 |  |  |  |

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 Impenda      | Typical Impendance ( $\Omega$ ) |  |  |  |  |
|----------------------|---------------------------------|--|--|--|--|
| 10 MHz               | 36                              |  |  |  |  |
| 25 MHz <sup>+</sup>  | 55                              |  |  |  |  |
| 100 MHz <sup>+</sup> | 82                              |  |  |  |  |
| 250 MHz              | 97                              |  |  |  |  |



### **CSV** Download

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