

## EMI Suppression Beads (2643004601)



Part Number: 2643004601

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.

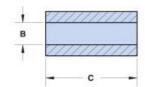
## Catalog Drawing 3D Model

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

Weight: 0.01 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 1.1  | -0.10  | 0.041        | _          |
| В   | 0.65 | +0.10  | 0.028        | _          |
| С   | 4.1  | -0.30  | 0.156        |            |







## **Chart Legend**

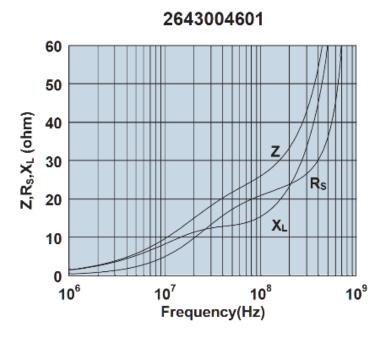
- + Test frequency
- The column "H (Oe)" gives for each bead the calculated dc bias field in oersted for 1 turn and 1 ampere direct current. The actual dc H field in the application is this value of "H" times the actual NI (ampere- turn) product. For the effect of the dc bias on the impedance of the bead material, see figures 18-23 in the application note □How to choose Ferrite Components for EMI Suppression□.

| Typical Impedance (Ω) |      |  |
|-----------------------|------|--|
| 10 MHz                | 9    |  |
| 25 MHz <sup>+</sup>   | 12.5 |  |
| 100 MHz <sup>+</sup>  | 31   |  |
| 250 MHz               | 39   |  |

| Electrical Properties |     |  |  |  |
|-----------------------|-----|--|--|--|
| H(Oe)                 | 4.7 |  |  |  |

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%.

Single turn impedance tests for 73 and 43 material beads are performed on the 4193A Vector Impedance Analyzer. The 61 material beads are tested on the 4291A RF Impedance Analyzer. Beads are tested with the shortest practical wire length.



Impedance, reactance, and resistance vs. frequency.

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