

## EMI Suppression Beads (2643012702)



Part Number: 2643012702

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.

<u>Weight:</u> 1.3 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |            | 31 1.2 |     |  |
|-----|------|--------|--------------|------------|------------|--------|-----|--|
| А   | 9.65 | ±0.25  | 0.38         |            | $\bigcirc$ | -      |     |  |
| В   | 6.35 | ±0.15  | 0.25         |            | 0          | в      |     |  |
| С   | 7.35 | ±0.25  | 0.289        | _          |            | Ţ      |     |  |
|     |      |        | *            |            | - A -      | -      | - C |  |

## **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[].

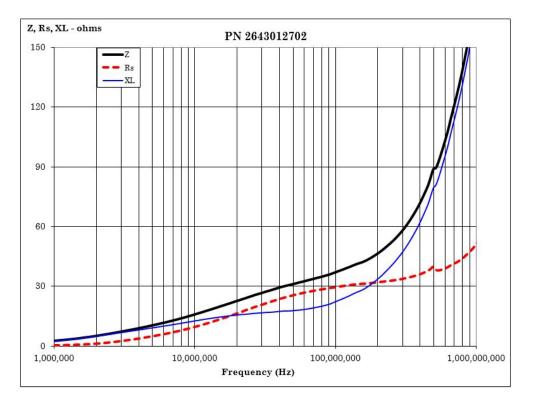
| Typical Impedance (Ω)        |      |   |  |  |  |  |
|------------------------------|------|---|--|--|--|--|
| 10 MHz                       | 16   |   |  |  |  |  |
| $25 \text{ MHz}^+$           | 25   |   |  |  |  |  |
| $100 \text{ MHz}^+$          | 37   |   |  |  |  |  |
| 250 MHz                      | 52   |   |  |  |  |  |
| <b>Electrical Properties</b> |      |   |  |  |  |  |
| H(Oe)                        | 0.51 | L |  |  |  |  |

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                 | 15 |  |  |  |
| 25 MHz <sup>+</sup>    | 24 |  |  |  |
| 100 MHz <sup>+</sup>   | 38 |  |  |  |
| 250 MHz                | 55 |  |  |  |



CSV Download

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