

# Round Cable EMI Suppression Cores (2631540002)



Part Number: 2631540002

## 31 ROUND CABLE CORE

### Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade
- Last digit 2 = Burnished (All cable cores have been burnished to remove the sharp edges)

Fair-Rite offers a broad selection of ferrite EMI suppression cable cores in several materials with guaranteed minimum impedance specifications.

For smaller suppression parts, refer to the section  EMI Suppression Beads .

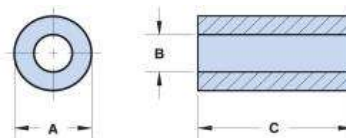
Our  Expanded Cable and Suppressor Kit  (part number 0199000005) contains a selection of these suppression cores.

**For any cable suppression core not listed here, feel free to contact our customer service group for availability and pricing.**

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

Weight: 17.7 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 14.3 | ±0.45  | 0.562        | _          |
| B   | 6.35 | ±0.25  | 0.25         | =          |
| C   | 28.6 | ±0.75  | 1.125        | =          |



### 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 .

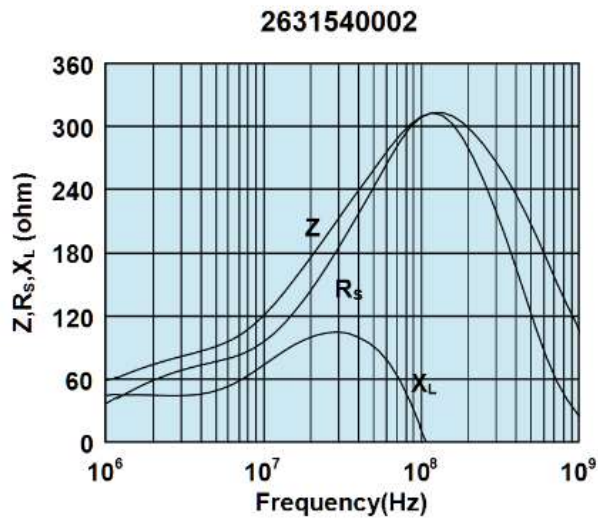
| Typical Impedance (Ω) |     |
|-----------------------|-----|
| 1 MHz                 | 35  |
| 5 MHz                 | 91  |
| 10 MHz <sup>+</sup>   | 119 |
| 25 MHz <sup>+</sup>   | 181 |
| 100 MHz <sup>+</sup>  | 300 |
| 250 MHz               | 280 |

Electrical Properties

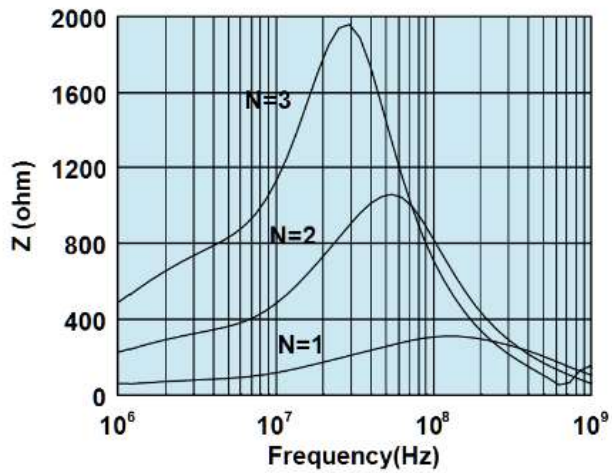
|       |      |
|-------|------|
| H(Oe) | 0.43 |
|-------|------|

Suppression cable cores 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 31, 43 and 46 material cores are performed on the 4193A Vector Impedance Meter. The 61 material parts are tested on the 4191A RF Impedance Analyzer and 75 material parts are tested on the 4285A LCR Meter. Cores are tested with the shortest practical wire length.



Impedance, reactance, and resistance vs. frequency.



Impedance vs. frequency with one, two, and three turns.