Fair-Rite Products Corp.
Your Signal Solution®

# Round Cable EMI Suppression Cores (2646480102)

Part Number: 2646480102

46 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.**

Catalog Drawing
3D Model

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

Weight: 6 (g)

| Dim | mm | mm tol | nominal inch | inch misc. |
|---|---|---|---|---|
| A | 12.3 | ±0.40 | 0.484 | _ |
| B | 4.95 | +0.25 | 0.2 | _ |
| C | 12.7 | ±0.40 | 0.5 | _ |

**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 | 47 |
| 25 MHz | 70 |
| 100 MHz+ | 108 |
| 250 MHz | 124 |

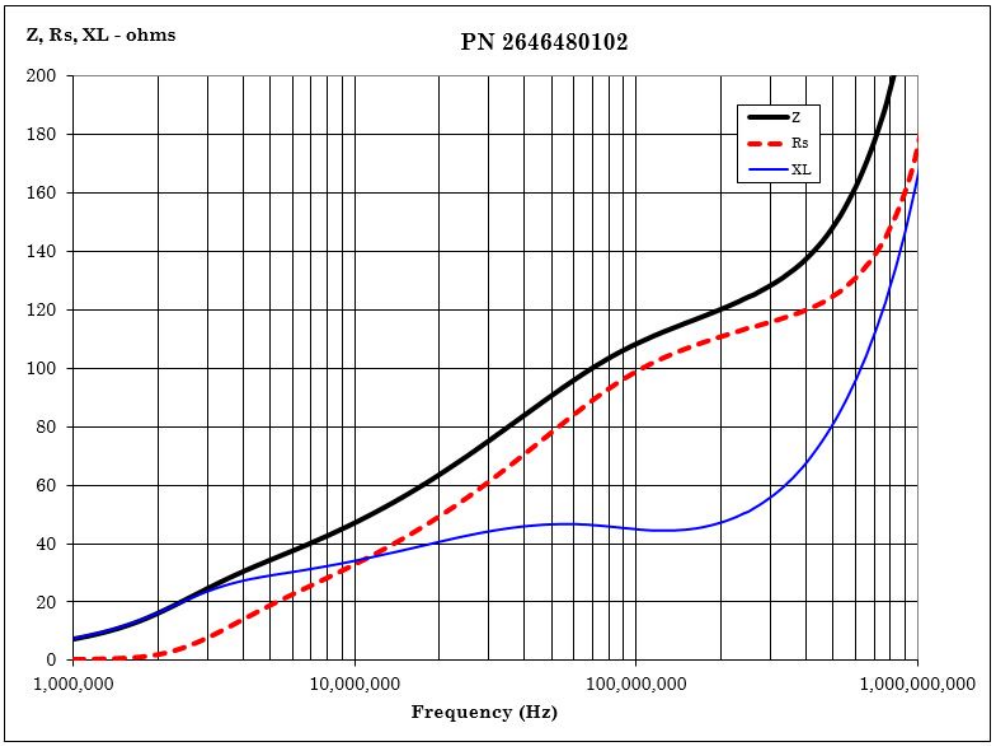
| Electrical Properties | |
|---|---|
| H(Oe) | 0.52 |

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%.

Catalog Drawing

Single turn impedance tests for 31, 43 and 46 material cores are performed on the E4991A/HP4291B Impedance Analyzer. The 61 material parts are tested on the E4991A / HP4291B Impedance Analyzer and 75 material parts are tested on the E4990A Impedance Analyzer. Cores are tested with the shortest practical wire length.

| Typical Impendance (Ω) | |
|---|---|
| 10 MHz | 42 |
| 25 MHz | 62 |
| 100 MHz+ | 110 |
| 250 MHz | 145 |



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