

Figure 2

Part Number: 0443167251

Generic Name:

Frequency Range: Broadband Frequencies 25-300 MHz (43 & 44 materials)

Description: 43 ROUND CABLE CORE ASSEMBLY

Application: Suppression Components

Where Used: Cable Component

Part Type: Round Cable Snap-Its

Part Type Information

Round cable snap-its can easily accommodate round cables or bundled wires with diameters from 2.5 mm (.100") to 25.4 mm (1.000"). These assemblies are available in four ferrite material classes to suppress differential or common-mode conducted EMI from 1 MHz into the GHz region. The polypropylene cases are meeting the RoHS restrictions of hazardous substances and have a flammability rating of UL94 V-0.

- Round cable snap-it assemblies 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 the 31, 43, 44 and 46 material are performed on the 4193A Vector Impedance Analyzer. The 61 material parts are tested on the 4291A RF Impedance Analyzer and 75 material parts are tested on the 4285A LCR Meter. Cores are tested with the shortest practical wire length.
- Performance curves for individual components can be viewed by clicking on the part number in the chart.
- Many of the snap-it parts have round core equivalents. See "[Round Cable EMI Suppression Cores](#)".
- "B" Dimension is the core Dimension.
- Round Cable Snap-it Kits are available for each of the four suppression materials. [31 Snap-It Kit \(0199000030\)](#), [43 Snap-It Kit \(0199000031\)](#), [46 Core and Snap-It Kit \(0199000032\)](#) and [61 Snap-It Kit \(0199000033\)](#).
- Explanation of Part Numbers: Digits 1 & 2 = product class and 3& 4 = material grade.

Mechanical Specifications

Weight: 42.00 (g)

Chart Legend

+ Test frequency

•For solid cable cores, see Round Cable EMI Suppression Cores

Dim	mm	mm tol	nominal inch	inch misc.
A	22.10	—	0.870	—
B	10.15	—	0.400	—
C	32.30	—	1.272	—
D	11.00	—	0.433	—
E	—	—	—	—
F	—	—	—	—
G	—	—	—	—
H	—	—	—	—
J	—	—	—	—
K	—	—	—	—

Electrical Specifications

Typical Impedance (Ω)	
10 MHz	79
25 MHz ⁺	138
100 MHz ⁺	225
250 MHz	285

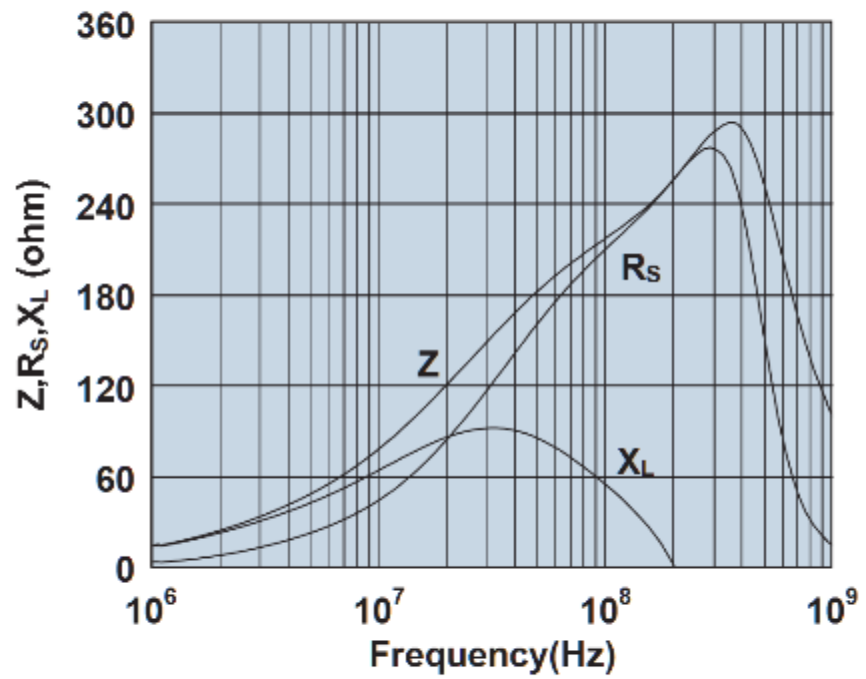
Ferrite Material Constants

Specific Heat	0.25 cal/g/°C
Thermal Conductivity	3.5 - 4.5 mW/cm - °C
Coefficient of Linear Expansion	8 - 10x10 ⁻⁶ /°C
Tensile Strength	4.9 kgf/mm ²
Compressive Strength	42 kgf/mm ²
Young's Modulus	15x10 ³ kgf/mm ²
Hardness (Knoop)	650
Specific Gravity	≈ 4.7 g/cm ³

The above quoted properties are typical for Fair-Rite MnZn and NiZn ferrites.

Impedance Curve

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Impedance, reactance, and resistance vs. frequency.