

Round Cable Snap-Its (0431176451)



Part Number: 0431176451

31 ROUND CABLE CORE ASSEMBLY

Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade

Round cable snap-its can easily accommodate round cables or bundled wires with diameters from 2.5 mm (0.100") 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 UL 94 V-0.

- Many of the snap-it parts have round core equivalents. See □ Round Cable EMI Suppression Cores □.
- 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).

The □B□ dimension is the core inside diameter.

Weight: 161 (g)

Dim	mm	mm tol	nominal inch	inch misc.
A	38.6	—	1.52	—
B	18.35	—	0.722	—
C	47.5	—	1.87	—
D	19.15	—	0.755	—

Cable Information			
Max Diameter	Max Dimension	Solid Equivalent	Flat Cable Cores
18 0.709	—	2631103002	—

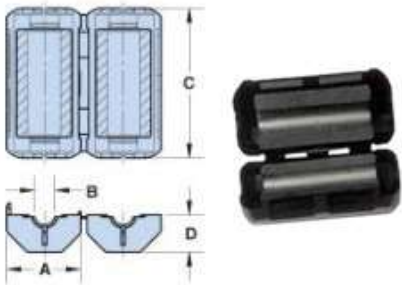


Figure 1

Chart Legend

+ Test frequency

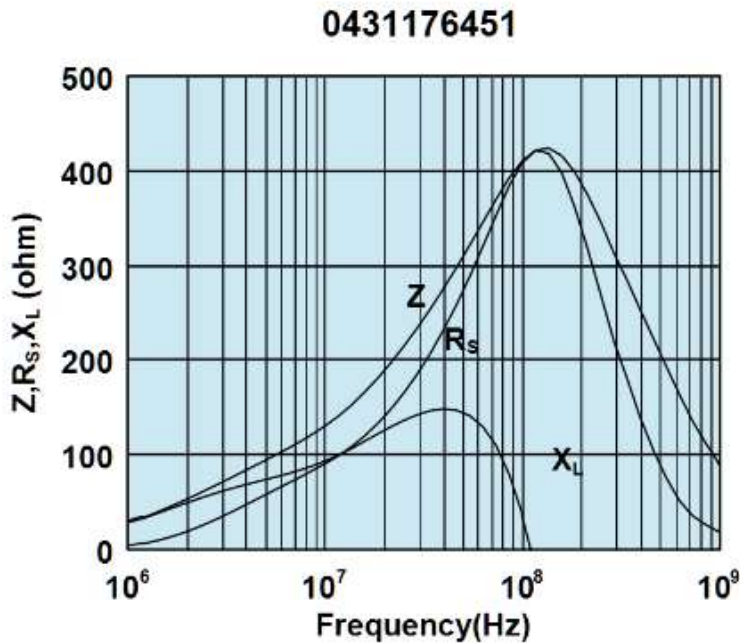
•For solid cable cores, see Round Cable EMI Suppression Cores

Typical Impedance (Ω)	
1 MHz	47
5 MHz	95
10 MHz ⁺	130

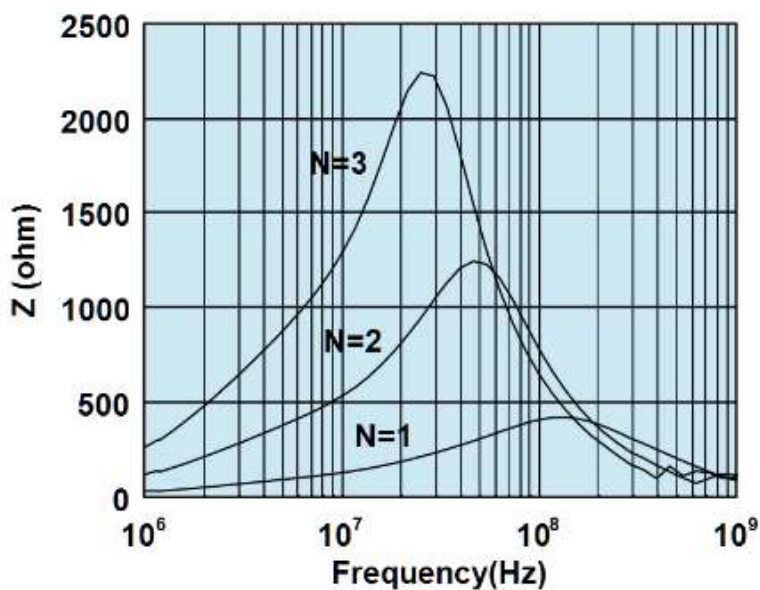
Typical Impedance (Ω)	
25 MHz ⁺	225
100 MHz ⁺	380
250 MHz	370

□ 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 parts 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.



Impedance, reactance, and resistance vs. frequency.



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

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