Fair-Rite Products Corp. Your Signal Solution*



Round Cable EMI Suppression Cores (2643814002)

Part Number: 2643814002

43 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.

<u>Weight:</u> 420 (g)

Dim	mm	mm tol	nominal inch	inch misc.		31			
A	101.6	±2.60	4	_	\bigcirc	1		////	Z
В	76.2	±2.00	3	_	(\bigcirc)	в			
С	25.4	±0.70	1	_		+		////	2
			•		- A -		-	- c -	

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[].

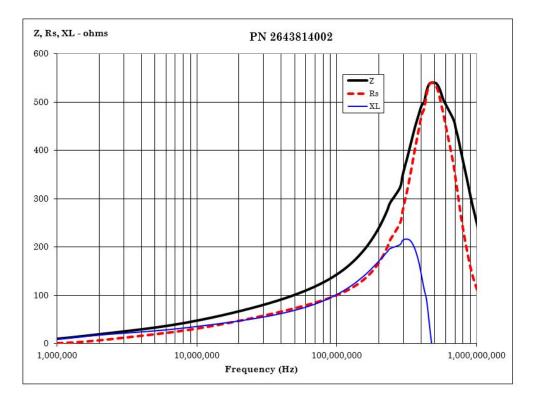
Typical Imp	Typical Impedance (Ω)					
10 MHz	47					
25 MHz^+	74					
100 MHz^+	143					
250 MHz	300					
Electrical H	Electrical Properties					
H(Oe)	0.0	5				

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	46			
25 MHz^+	75			
100 MHz^+	169			
250 MHz	400			



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