

# Toroids (5943000221)

Part Number: 5943000221

43 TOROID PLASTIC COATED

Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade
- 9th digit 1 = Parylene Coating, 2 = Thermo-Set Plastic Coating

**A ring configuration provides the ultimate utilization of the intrinsic ferrite material properties. Toroidal cores are used in a wide variety of applications such as power input filters, ground-fault interrupters, common-mode filters and in pulse and broadband transformers.**

All toroidal cores are supplied burnished to break sharp edges.

Coating Options:

- Toroids with an outside diameter of 9.5 mm (0.375") or smaller can be supplied Parylene C coated. The Parylene coating will increase the "A" and "C" dimensions and decrease the "B" dimension a maximum of 0.038 mm (0.0015"). The ninth digit of a Parylene coated toroid part number is a "1". See reference tables for the material characteristics of Parylene C. Parylene C coating is RoHS compliant.
- Toroids with an outside diameter of 9.5 mm (0.375") or larger can be supplied with a uniform coating of thermo-set plastic coating. This coating will increase the "A" and "C" dimensions and decrease the "B" dimension a maximum of 0.5 mm (0.020"). The 9th digit of the thermo-set plastic coated toroid part number is a "2". Thermo-set plastic coating is RoHS compliant.
- Thermo-set plastic coated parts can withstand a minimum breakdown voltage of 1000 Vrms, uniformly applied across the "C" dimension of the toroid.

**For any toroidal core requirement not listed in the catalog, please contact our customer service department for availability and pricing.**

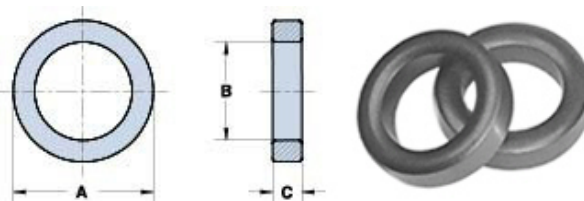
[Catalog Drawing](#)

[3D Model](#)

The C dimension may be modified to suit specific applications.

Weight: 0.83 (g)

Dim	mm	mm tol	nominal inch	inch misc.
A	10.2	Max	0.401	Max
B	4.1	Min	0.162	Min
C	3.8	Max	0.149	Max



**Chart Legend**

$\Sigma l/A$  : Core Constant,  $l_e$  : Effective Path Length,  $A_e$  : Effective Cross-Sectional Area,  $V_e$  : Effective Core

Volume

$A_L$  : Inductance Factor  $(\frac{L}{N^2})$

Electrical Properties	
$A_L(\text{nH})$	350+20%, -25%
$A_e(\text{cm}^2)$	0.072
$\Sigma l/A(\text{cm}^{-1})$	28.6
$l_e(\text{cm})$	2.07
$V_e(\text{cm}^3)$	0.15

Toroids are tested for  $A_L$  values at 10 kHz.

Fair-Rite Products Corp. • One Commercial Row, Wallkill, New York 12589-0288

888-324-7748 • 845-895-2055 • Fax: 845-895-2629 • [ferrites@fair-rite.com](mailto:ferrites@fair-rite.com) • [www.fair-rite.com](http://www.fair-rite.com)