

# Toroids (5977000301)



Part Number: 5977000301

77 TOROID

## 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:

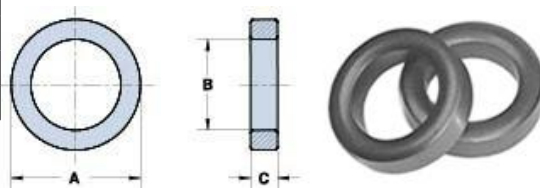
- Toroids with an outside diameter of 9.5 mm (0.375") or smaller can be supplied Parylene C coated. The Parylene coating will increase the "A" and "C" dimensions and decrease the "B" dimension a maximum of 0.038 mm (0.0015"). The ninth digit of a Parylene coated toroid part number is a "1". See reference 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.

The □C□ dimension may be modified to suit specific applications.

Weight: 2 (g)

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| A   | 12.7 | ±0.25  | 0.5          | —          |
| B   | 7.15 | ±0.20  | 0.281        | —          |
| C   | 4.9  | -0.25  | 0.188        | —          |



## 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 

| Electrical Properties              |           |
|------------------------------------|-----------|
| $A_L$ (nH)                         | 1180 ±25% |
| $A_e$ (cm <sup>2</sup> )           | 0.129     |
| $\Sigma l / A$ (cm <sup>-1</sup> ) | 22.9      |
| $l_e$ (cm)                         | 2.95      |
| $V_e$ (cm <sup>3</sup> )           | 0.38      |

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 • www.fair-rite.com