Fair-Rite Products Corp.

Your Signal Solution®

## Toroids (5977000101)



Part Number: 5977000101

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.

Catalog Drawing 3D Model

The C dimension may be modified to suit specific applications.

Weight:	0.14	(g)

Dim	mm	mm tol	nominal inch	inch misc.			
А	5.95	-0.25	0.229	_			
В	3.05	±0.10	0.12	_	(())		
С	1.65	-0.25	0.06			8	
						' 🖯	CP

## **Chart Legend**

 $\Sigma l/A$ : Core Constant,  $l_e$ : Effective Path Length,  $A_e$ : Effective Core Volume  $A_L$ : Inductance Factor

 $A_e$ : Effective Cross- Sectional Area,  $V_e$ :

Electrical Properties		
A <sub>L</sub> (nH)	420 ±25%	
$Ae(cm^2)$	0.02	
$\Sigma l / A(cm^{-1})$	63.7	
l <sub>e</sub> (cm)	1.3	
$V_{e}(cm^{3})$	0.027	

Toroids are tested for  $A_{_{\rm L}}$  values at 10 kHz.

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