

# Toroids (5952020401)



Part Number: 5952020401

52 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.

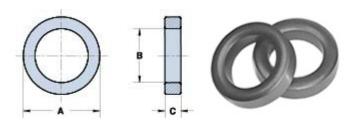
## For any toroidal core requirement not listed in the catalog, please contact our customer service department for availability and pricing.

### Catalog Drawing 3D Model

The C dimension may be modified to suit specific applications.

Weight: 2.16 (g)

Dim	mm	mm tol	nominal inch	inch misc.
Α	12.6	±0.25	0.496	_
В	6.99	±0.20	0.275	_
С	4.9	-0.25	0.188	_
-				•



### **Chart Legend**

 $\begin{array}{ll} \Sigma l/A \ : \ Core \ Constant, & l_{e}: \ Effective \ Path \ Length, & A_{e}: \ Effective \ Cross-Sectional \ Area, & V_{e}: \\ Effective \ Core \ Volume & & \\ A_{L}: \ Inductance \ Factor & \hline \end{array}$ 

<b>Electrical Properties</b>				
A <sub>L</sub> (nH)	141 ±25%			
Ae(cm <sup>2</sup> )	0.13			
$\Sigma l/A(cm^{-1})$	22.31			
l <sub>e</sub> (cm)	2.9			
V <sub>e</sub> (cm <sup>3</sup> )	0.378			

Toroids are tested for  $A_{\!\scriptscriptstyle L}$  values at 10 kHz.

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