



## Toroids (5952003801)



Part Number: 5952003801

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.**

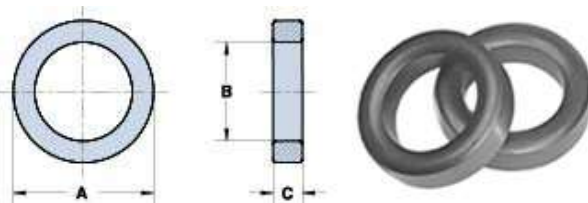
[Catalog Drawing](#)

[3D Model](#)

The C dimension may be modified to suit specific applications.

Weight: 133.44 (g)

Dim	mm	mm tol	nominal inch	inch misc.
A	60	±1.30	2.36	—
B	35.35	±0.60	1.39	—
C	12.7	±0.50	0.5	—



### **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	
$A_L(\text{nH})$	325 $\pm$ 25%
$A_e(\text{cm}^2)$	1.58
$\Sigma l/A(\text{cm}^{-1})$	9.16
$l_e(\text{cm})$	14.5
$V_e(\text{cm}^3)$	22.8

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

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