

Part Number: 5978002701

78 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.

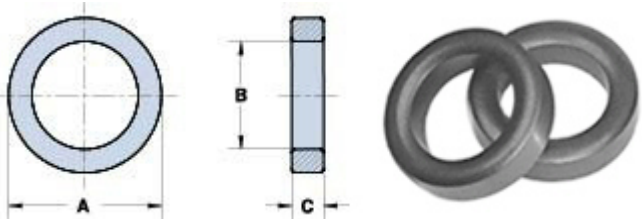
**For any toroidal core requirement not listed in the catalog, please contact our customer service department for availability and pricing.**

The C dimension may be modified to suit specific applications.

Weight: 33 (g)

| Dim | mm    | mm tol | nominal inch | inch misc. |
|-----|-------|--------|--------------|------------|
| A   | 35.55 | ±0.75  | 1.4          | —          |
| B   | 23    | ±0.55  | 0.9          | —          |

| Dim | mm   | mm tol | nominal inch | inch misc. |
|-----|------|--------|--------------|------------|
| 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    

| Electrical Properties        |           |
|------------------------------|-----------|
| $A_L(\text{nH})$             | 2545 ±25% |
| $A_e(\text{cm}^2)$           | 0.906     |
| $\Sigma l/A(\text{cm}^{-1})$ | 11.2      |
| $l_e(\text{cm})$             | 8.9       |
| $V_e(\text{cm}^3)$           | 7         |

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

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