

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_c : Effective Path Length, A_c : Effective Cross- Sectional Area, V_c : Effective Core Volume

A_L : Inductance Factor 

| Electrical Properties | |
|------------------------------------|-----------|
| A_L (nH) | 1180 ±25% |
| A_e (cm ²) | 0.129 |
| $\Sigma l / A$ (cm ⁻¹) | 22.9 |
| l_c (cm) | 2.95 |
| V_c (cm ³) | 0.38 |

Toroids are tested for A_L values at 10 kHz.

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