Fair-Rite Products Corp.
Your Signal Solution®

Toroids (5977001601)

Part Number: 5977001601

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: 18 (g)

Dim	mm	mm tol	nominal inch	inch misc.
A	31.1	±0.75	1.221	_
B	19.05	±0.50	0.75	_
C	7.9	±0.30	0.311	_

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(nH)	1665 ±25%
Ae(cm^2)	0.47
$\Sigma l/A$(cm^{-1})	16.2
l_e(cm)	7.6
V_e(cm^3)	3.53

Toroids are tested for A_L values at 10 kHz.

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