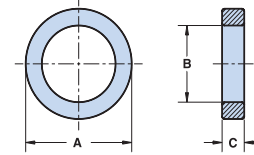


Toroids

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.



- Toroids are listed by initial permeability classes and increasing dimension of the inside diameter.
- All toroidal cores are supplied burnished to break sharp edges.

- Toroids are tested for A_L values at 10 kHz. The square loop 85 material toroids are specified to a squareness ratio and not to an A_L value.

- Toroids with an outside diameter of 9.5mm (.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 0.038mm (.0015"). The ninth digit of a Parylene coated toroid part number is a "1". See page 124 for the material characteristics of Parylene C. Parylene C coating is RoHS compliant.

- Toroids with an outside diameter of 9.5mm (.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 0.5mm (.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.

- Explanation of Part Numbers: Digits 1&2 = product class, 3&4 = material grade, 9th digit 1 = Parylene coating, 2 = thermo-set plastic coating,

Symbols	Definitions
$\Sigma l/A$	Core constant
ℓ_e	Effective path length
A_e	Effective cross-sectional area
V_e	Effective core volume
A_L	Inductance factor ($\frac{\ell_e}{N^2}$)

Low Permeability, 67 ($\mu_i=40$) & 61 ($\mu_i=125$) Materials

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 25\%$
5961000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	25
5967000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	18
5961000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	55
5967000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	22
5961000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	69
5967001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	24
5961001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	75
5967001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	48
5961001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	150
5961004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	19.4	3.85	0.199	0.77	80
5967000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	24
5961000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	75

* This dimension may be modified to suit specific applications.

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Toroids

Symbols	Definitions
$\Sigma l/A$	Core constant
ℓ_e	Effective path length
A_e	Effective cross-sectional area
V_e	Effective core volume
A_L	Inductance factor ($\frac{L}{N^2}$)

Low Permeability, 67 ($\mu_i=40$) & 61 ($\mu_i=125$) Materials

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 25\%$
5961000501	21.0±0.35 .825	13.2±0.3 .520	11.9±0.4 .468	12	11.4	5.2	0.46	2.36	135
5967001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	24
5961001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	75
5961001001	29.0±0.65 1.142	19.0±0.5 .748	7.5±0.25 .295	13	19.8	7.3	0.37	2.70	80
5961001201	29.0±0.65 1.142	19.0±0.5 .748	13.85±0.3 .545	26	10.7	7.3	0.68	5.0	145
5961001701	31.75±0.75 1.250	19.05±0.5 .750	9.5±0.3 .375	23	12.9	7.6	0.59	4.5	120
5967002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	45
5961002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	140
5967003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	55
5961003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	170

Low - Medium Permeability, 43 ($\mu_i=800$) Material

Part Number	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\%$
5943000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.05	87.6	0.92	0.011	0.0097	117
5943002101	4.95 - 0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	69.2	1.04	0.015	0.0157	150
5943000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	158
5943000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	350
5943000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	440
5943001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	480
5943001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	965
5943005101	16.0±0.4 .630	9.6±0.3 .378	4.75 - 0.25 .182	2.8	26.6	3.85	0.145	0.56	375
5943004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	19.4	3.85	0.199	0.77	520
5943000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	470
5943000501	21.0±0.35 .825	13.2±0.3 .520	11.9±0.4 .468	12	11.4	5.2	0.46	2.36	885

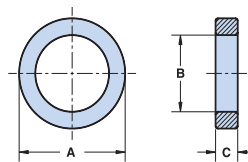
* This dimension may be modified to suit specific applications.

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Toroids



Low - Medium Permeability, 43 ($\mu_i=800$) Material

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	$\ell_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\%$
5943001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	485
5943007601	22.1±0.4 .870	13.7±0.3 .540	12.7±0.45 .500	15	10.3	5.4	0.52	2.83	970
5943001301	25.4±0.6 1.000	15.5±0.5 .610	6.35±0.25 .250	9.6	20.0	6.2	0.308	1.90	500
5943001401	25.4±0.6 1.000	15.5±0.5 .610	8.15±0.3 .320	12	15.1	6.2	0.41	2.52	645
5943006401	25.4±0.6 1.000	15.5±0.5 .610	12.7±0.5 .500	19	10.0	6.2	0.62	3.80	1000
5943001001	29.0±0.65 1.142	19.0±0.5 .748	7.5±0.25 .295	13	19.8	7.3	0.37	2.70	510
5943001201	29.0±0.65 1.142	19.0±0.5 .748	13.85±0.3 .545	26	10.7	7.3	0.68	5.0	950
5943001601	31.1±0.75 1.225	19.05±0.5 .750	7.9±0.3 .312	18	16.2	7.6	0.47	3.53	620
5943001701	31.75±0.75 1.250	19.05±0.5 .750	9.5±0.3 .375	23	12.9	7.6	0.59	4.5	775
5943002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	885
5943018601	43.6±1.0 1.717	23.1±0.50 .909	18.0±0.5 .709	90	5.5	9.8	1.78	17.5	1550 Min.
5943017301	48.3±1.0 1.902	31.8±0.6 1.252	19.05±0.35 .750	94	7.9	12.2	1.55	18.9	1080 Min.
5943018701	56.3±1.2 2.217	32.7±0.7 1.287	18.0±0.5 .709	135	6.4	13.3	2.07	27.6	1330 Min.
5943003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	1075
5943011101	73.65±1.5 2.900	38.85±0.75 1.530	12.7±0.4 .500	188	7.8	16.7	2.15	35.9	1100 Min.
5943015901	100.0±2.0 3.937	55.0±1.2 2.165	12.7±0.3 .500	320	8.3	23.0	2.77	63.7	1030 Min.
5943017501	102.6±2.1 4.039	63.5±1.3 2.500	15.85±0.35 .624	360	8.3	25.1	3.0	70.5	1035 Min.

Medium Permeability, 77 ($\mu_i=2000$) & 78 ($\mu_i=2300$) Materials

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	$\ell_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\%$
5977000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.05	87.6	0.92	0.011	0.0097	285
5978000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.05	87.6	0.92	0.011	0.0097	335

* This dimension may be modified to suit specific applications.

** Bold part numbers designate preferred parts.

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Toroids

Symbols	Definitions
$\Sigma l/A$	Core constant
ℓ_e	Effective path length
A_e	Effective cross-sectional area
V_e	Effective core volume
A_L	Inductance factor ($\frac{L}{N^2}$)

Medium Permeability, 77 ($\mu_i=2000$) & 78 ($\mu_i=2300$) Materials

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\% \pm$
5977002101	4.95 - 0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	69.2	1.04	0.015	0.0157	360
5978002101	4.95 - 0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	69.2	1.04	0.015	0.0157	440
5977000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	390
5978000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	455
5977000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	880
5978000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	1010
5977000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	1100
5978000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	1260
5977001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	1200
5978001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	1390
5977001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	2400
5978001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	2775
5977005101	16.0±0.4 .630	9.6±0.3 .378	4.75 - 0.25 .182	2.8	26.6	3.85	0.145	0.56	940
5978005101	16.0±0.4 .630	9.6±0.3 .378	4.75 - 0.25 .182	2.8	26.6	3.85	0.145	0.56	1090
5977004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	19.4	3.85	0.199	0.77	1300
5978004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	19.4	3.85	0.199	0.77	1490
5977000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	1175
5978000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	1355
5977000501	21.0±0.35 .825	13.2±0.3 .520	11.9±0.4 .468	12	11.4	5.2	0.46	2.36	2200
5978000501	21.0±0.35 .825	13.2±0.3 .520	11.9±0.4 .468	12	11.4	5.2	0.46	2.36	2540
5977001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	1200
5978001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	1400

* This dimension may be modified to suit specific applications.

* AL tolerance for plastic coated toroids is +20%, -25%.

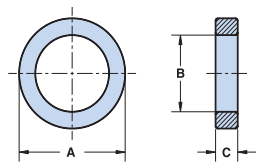
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Toroids



Medium Permeability, 77 ($\mu_i=2000$) & 78 ($\mu_i=2300$) Materials

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	$\ell_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\% +$
5977007601	22.1±0.4 .870	13.7±0.3 .540	12.7±0.45 .500	15	10.3	5.4	0.52	2.83	2425
5978007601	22.1±0.4 .870	13.7±0.3 .540	12.7±0.45 .500	15	10.3	5.4	0.52	2.83	2795
5977001301	25.4±0.6 1.000	15.5±0.5 .610	6.35±0.25 .250	9.6	20.0	6.2	0.308	1.90	1250
5978001301	25.4±0.6 1.000	15.5±0.5 .610	6.35±0.25 .250	9.6	20.0	6.2	0.308	1.90	1445
5977001401	25.4±0.6 1.000	15.5±0.5 .610	8.15±0.3 .320	12	15.1	6.2	0.41	2.52	1600
5978001401	25.4±0.6 1.000	15.5±0.5 .610	8.15±0.3 .320	12	15.1	6.2	0.41	2.52	1850
5977006401	25.4±0.6 1.000	15.5±0.5 .610	12.7±0.5 .500	19	10.0	6.2	0.62	3.80	2500
5978006401	25.4±0.6 1.000	15.5±0.5 .610	12.7±0.5 .500	19	10.0	6.2	0.62	3.80	2885
5977001001	29.0±0.65 1.142	19.0±0.5 .748	7.5±0.25 .295	13	19.8	7.3	0.37	2.70	1275
5978001001	29.0±0.65 1.142	19.0±0.5 .748	7.5±0.25 .295	13	19.8	7.3	0.37	2.70	1460
5977001201	29.0±0.65 1.142	19.0±0.5 .748	13.85±0.3 .545	26	10.7	7.3	0.68	5.0	2350
5978001201	29.0±0.65 1.142	19.0±0.5 .748	13.85±0.3 .545	26	10.7	7.3	0.68	5.0	2695
5977001601	31.1±0.75 1.225	19.05±0.5 .750	7.9±0.3 .312	18	16.2	7.6	0.47	3.53	1550
5978001601	31.1±0.75 1.225	19.05±0.5 .750	7.9±0.3 .312	18	16.2	7.6	0.47	3.53	1780
5977001701	31.75±0.75 1.250	19.05±0.5 .750	9.5±0.3 .375	23	12.9	7.6	0.59	4.5	1950
5978001701	31.75±0.75 1.250	19.05±0.5 .750	9.5±0.3 .375	23	12.9	7.6	0.59	4.5	2230
5977002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	2250
5978002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	2545

* This dimension may be modified to suit specific applications.

* AL tolerance for plastic coated toroids is +20%, -25%.

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Toroids

Symbols	Definitions
$\Sigma l/A$	Core constant
ℓ_e	Effective path length
A_e	Effective cross-sectional area
V_e	Effective core volume
A_L	Inductance factor ($\frac{L}{N^2}$)

Medium Permeability, 77 ($\mu_i=2000$) & 78 ($\mu_i=2300$) Materials

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 25\% +$
5978018601	43.6±1.0 1.717	23.1±0.50 .909	18.0±0.5 .709	90	5.5	9.8	1.78	17.5	5260
5978017301	48.3±1.0 1.902	31.8±0.6 1.252	19.05±0.35 .750	94	7.9	12.2	1.55	18.9	3670
5978018701	56.3±1.2 2.217	32.7±0.7 1.287	18.0±0.5 .709	135	6.4	13.3	2.07	27.6	4500
5977003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	2725
5978003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	3155
5977011101	73.65±1.5 2.900	38.85±0.75 1.530	12.7±0.4 .500	188	7.8	16.7	2.15	35.9	3225
5978011101	73.65±1.5 2.900	38.85±0.75 1.530	12.7±0.4 .500	188	7.8	16.7	2.15	35.9	3740
5978015901	100.0±2.0 3.937	55.0±1.2 2.165	12.7±0.3 .500	320	8.3	23.0	2.77	63.7	3500
5978017501	102.6±2.1 4.039	63.5±1.3 2.500	15.85±0.35 .624	360	8.3	25.1	3.0	70.5	3500
5978008001	152.4±3.1 6.000	68.6±1.5 2.701	19.05±0.5 .750	1240	4.1	31.3	7.6	237	7000
5978014001	101.6±2.1 4.000	75.2±1.5 2.961	24.75±0.55 .974	425	8.4	27.4	3.24	88.7	3425

* AL tolerance for plastic coated toroids is +25%, -30%.

High Permeability, 75 ($\mu_i=5000$) & 76 ($\mu_i=10,000$) Materials

Part Number**	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	ℓ_e (cm)	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\%$
5975000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.05	87.6	0.92	0.011	0.0097	715
5976000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.05	87.6	0.92	0.011	0.0097	1430±30%
5975002101	4.95 - 0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	69.2	1.04	0.015	0.0157	900
5976002101	4.95 - 0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	69.2	1.04	0.015	0.0157	1800±30%
5975000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	975
5976000101	5.95 - 0.25 .230	3.05±0.1 .120	1.65 - 0.25 .060	.14	63.8	1.30	0.020	0.027	1950±30%
5975000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	2200
5976000201	9.5±0.2 .375	4.75±0.15 .187	3.3 - 0.25 .125	.83	28.6	2.07	0.072	0.15	4400±30%

* This dimension may be modified to suit specific applications.

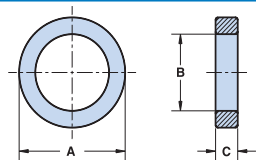
** Bold part numbers designate preferred parts.

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PO Box J, One Commercial Row, Wallkill, NY 12589-0288

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Toroids



High Permeability , 75 ($\mu_i = 5000$) Material

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number	A	B	C*	Wt (g)	$\Sigma l/A(\text{cm}^{-1})$	$l_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_L(\text{nH})$ $\pm 20\% +$
5975000301	12.7±0.25 .500	7.15±0.2 .281	4.9 - 0.25 .188	2.0	22.9	2.95	0.129	0.38	2725
5975001101	12.7±0.25 .500	7.9±0.2 .312	6.35±0.25 .250	2.4	20.8	3.12	0.150	0.47	3000
5975001901	12.7±0.25 .500	7.9±0.2 .312	12.7±0.35 .500	4.7	10.4	3.12	0.299	0.93	6000
5975005101	16.0±0.4 .630	9.6±0.3 .378	4.75 - 0.25 .182	2.8	26.6	3.85	0.145	0.56	2350
5975004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	19.4	3.85	0.199	0.77	3225
5975000601	21.0±0.35 .825	13.2±0.3 .520	6.35±0.25 .250	6.4	21.3	5.2	0.243	1.26	2950
5975000501	21.0±0.35 .825	13.2±0.3 .520	11.9±0.4 .468	12	11.4	5.2	0.46	2.36	5500
5975001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	20.7	5.4	0.262	1.42	3025
5975007601	22.1±0.4 .870	13.7±0.3 .540	12.7±0.45 .500	15	10.3	5.4	0.52	2.83	6100
5975001301	25.4±0.6 1.000	15.5±0.5 .610	6.35±0.25 .250	9.6	20.0	6.2	0.308	1.90	3140
5975001401	25.4±0.6 1.000	15.5±0.5 .610	8.15±0.3 .320	12	15.1	6.2	0.41	2.52	4000
5975006401	25.4±0.6 1.000	15.5±0.5 .610	12.7±0.5 .500	19	10.0	6.2	0.62	3.80	6250
5975001001	29.0±0.65 1.142	19.0±0.5 .748	7.5±0.25 .295	13	19.8	7.3	0.37	2.70	3175
5975001601	31.1±0.75 1.225	19.05±0.5 .750	7.9±0.3 .312	18	16.2	7.6	0.47	3.53	3850
5975001701	31.75±0.75 1.250	19.05±0.5 .750	9.5±0.3 .375	23	12.9	7.6	0.59	4.5	4850
5975002701	35.55±0.75 1.400	23.0±0.55 .900	12.7±0.5 .500	33	11.2	8.9	0.79	7.0	5500
5975003801	61.0±1.3 2.400	35.55±0.85 1.400	12.7±0.5 .500	106	9.2	14.5	1.58	22.8	6850
5975011101	73.65±1.5 2.900	38.85±0.75 1.530	12.7±0.4 .500	188	7.8	16.7	2.15	35.9	8100

* This dimension may be modified to suit specific applications.

* A_L tolerance for plastic coated toroids is +20%, -25%.

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(888) 324-7748

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Toroids

The Fair-Rite grade 85 ferrite is a unique square loop high frequency material. Toroids from this material are used in magnetic amplifiers and saturable reactors

Symbols	Definitions
$\Sigma l/A$	Core constant
ℓ_e	Effective path length
A_e	Effective cross-sectional area
V_e	Effective core volume

Square Loop, 85 Material

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number	A	B	C*	Wt (g)	Radial Resonant Frequency** (kHz)	$\Sigma l/A$ (cm ⁻¹)	ℓ_e (cm)	A_e (cm ²)	V_e (cm ³)
5985010101	2.55±0.1 .100	1.2±0.15 .050	1.4 - 0.25 .050	.02	984	71.3	0.56	0.0078	0.0043
5985010201	3.5±0.1 .138	1.7±0.15 .070	1.4 - 0.25 .050	.05	687	72.3	0.77	0.011	0.0081
5985000801	3.95±0.15 .155	2.15±0.15 .088	1.4 - 0.25 .050	.06	589	87.6	0.92	0.011	0.0097
5985002101	4.95±0.25 .190	2.2±0.15 .090	1.4 - 0.25 .050	.09	510	69.2	1.04	0.015	0.0157
5985000101	5.95±0.25 .230	3.05±0.1 .120	1.65±0.25 .060	.14	408	63.8	1.30	0.020	0.027
5985015501	6.35±0.2 .250	3.2±0.2 .125	12.7±0.35 .500	1.5	381	7.14	1.38	0.194	0.27
5985000201	9.5±0.2 .375	4.75±0.15 .187	3.3±0.25 .125	.83	254	28.6	2.07	0.072	0.15
5985016001	9.5±0.2 .375	5.7±0.2 .224	3.3±0.25 .125	.70	239	38.4	2.29	0.059	0.136
5985001101	12.7±0.25 .500	7.9±0.20 .312	6.35±0.25 .250	2.4	176	20.8	3.12	0.150	0.47
5985013501	14.0±0.25 .551	9.0±0.3 .354	5.0±0.15 .197	2.2	158	28.4	3.50	0.123	0.43
5985004901	16.0±0.4 .630	9.6±0.3 .378	6.35±0.25 .250	4.0	142	19.4	3.85	0.199	0.77
5985001801	22.1±0.4 .870	13.7±0.3 .540	6.35±0.25 .250	7.2	101	20.7	5.4	0.262	1.42
5985001301	25.4±0.6 1.000	15.5±0.5 .610	6.35±0.25 .250	9.6	89	20.0	6.2	0.308	1.90

* This dimension may be modified to suit specific applications.

** It is not advised to drive the toroidal cores within 10% of their radial resonant frequency. Cracks or even breakage of the cores could result.

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