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Bobbins are an economical and well-proven core design for many applications where relatively low but stable inductance values are required.

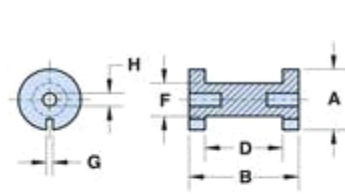


Figure 1

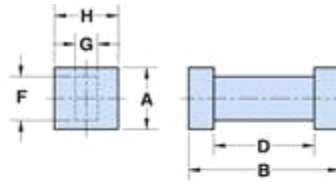


Figure 2

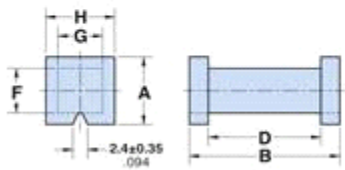


Figure 3

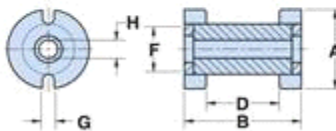


Figure 4

- For higher frequency designs, use small bobbins in 43 material.
- For power applications, bobbins in 77 material are specified for A_L and dc bias limits.
- Bobbins in Figures 2-5 can be supplied with a uniform thermo-set plastic coating which can withstand a minimum breakdown of 500Vrms. This coating will change the dimensions a maximum of 0.5 mm (0.020"). The last digit of the thermo-set plastic coated part is an "8".
- The listed dimensions are for assembled bobbins without thermo-set plastic.
- Bobbins are tested for A_L value at 1kHz < 10 gauss.
- For any bobbin requirement not listed in the catalog, please contact our customer service group for availability and pricing,
- Explanation of Part Numbers: Digits 1&2 = product class, 3&4 = material grade, last digit 8 = coated bobbin.

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Legend: Symbols & Definition

Dimensions (Top numbers are in millimeters, bottom numbers are in nominal inches.)

A_L : Inductance Factor ($\frac{L}{N^2}$), NI: Value of dc Ampere-turns, A_W : Winding Area, N/AWG: Number of Turns / Wire Size for Test Coil

High Frequency Designs

Row #	Part Number	Fig.	A	B	D	F	G	H	Wt. (g)
(1)	9643001165	1	5.05 -0.15 0.196	12.70 ±0.25 0.500	10.00 +0.30 0.400	2.65 +0.10 0.107	0.50 ±0.10 0.020	1.00 +0.10 0.042	1.30
(2)	9643001015	1	9.55 -0.15 0.373	19.00 ±0.70 0.750	12.70 ±0.15 0.500	4.65 +0.20 0.187	1.00 +0.25 0.045	1.03 +0.10 0.043	6.70
(3)	9843000104	2	8.05 ±0.20 0.317	19.00 ±0.40 0.750	12.70 ±0.25 0.500	5.55 +0.25 0.225	2.70 +0.25 0.111	8.05 ±0.20 0.317	3.00

Table Continued ...

Row #	Part Number	A_L (nH)	A_L min. @ NI(At)	N/AWG	A_W (cm ²)
(1)	9643001165	17.5 ±10%	-	30/24	0.12
(2)	9643001015	38.0 ±10%	-	75/24	0.30
(3)	9843000104	38.0 ±10%	-	50/28	0.33

Power Applications

Row #	Part Number	Fig.	A	B	D	F	G	H	Wt. (g)
(4)	9677001165	1	5.05 -0.15 0.196	12.70 ±0.25 0.500	10.00 +0.30 0.400	2.65 +0.10 0.107	0.50 ±0.10 0.020	1.00 +0.10 0.042	1.30
(5)	9677001015	1	9.55 -0.15 0.373	19.00 ±0.70 0.750	12.70 ±0.15 0.500	4.65 +0.20 0.187	1.00 +0.25 0.045	1.03 +0.10 0.043	6.70
(6)	9877000104	2	8.05 ±0.20 0.317	19.00 ±0.40 0.750	12.70 ±0.25 0.500	5.55 +0.25 0.225	2.70 +0.25 0.111	8.05 ±0.20 0.317	3.00
(7)	9877000204	3	11.30 ±0.25 0.445	25.00 ±0.50 0.984	18.95 ±0.45 0.746	7.50 ±0.25 0.295	7.45 ±0.25 0.293	11.40 ±0.40 0.449	8.40
(8)	9677142009	4	14.00 ±0.35 0.551	20.00 ±0.70 0.788	12.50 ±0.30 0.492	9.00 ±0.30 0.354	2.00 ±0.30 0.079	3.20 ±0.10 0.126	8.50
(9)	9677182009	4	18.00 ±0.45 0.709	20.00 ±0.70 0.788	12.50 ±0.30 0.492	11.00 ±0.30 0.433	2.50 ±0.30 0.098	3.20 ±0.10 0.126	13.00
(10)	9677182209	4	18.00 ±0.45 0.709	22.00 ±0.70 0.866	14.50 ±0.35 0.570	11.00 ±0.30 0.433	2.50 ±0.30 0.098	3.20 ±0.10 0.126	14.00
(11)	9677242009	4	24.00 ±0.60 0.945	20.00 ±0.70 0.788	12.50 ±0.30 0.492	13.00 ±0.30 0.512	3.00 ±0.30 0.118	3.20 ±0.10 0.126	22.00
(12)	9677242409	4	24.00 ±0.60 0.945	24.00 ±0.70 0.946	16.50 ±0.40 0.650	13.00 ±0.30 0.512	3.00 ±0.30 0.118	3.20 ±0.10 0.126	24.00
(13)	9677282009	4	28.00 ±0.70 1.102	20.00 ±0.70 0.788	12.50 ±0.30 0.492	17.00 ±0.40 0.670	3.00 ±0.30 0.118	4.20 ±0.15 0.165	33.00
(14)	9677282509	4	28.00 ±0.70 1.102	25.00 ±0.70 0.985	18.00 ±0.45 0.708	17.00 ±0.40 0.670	3.00 ±0.30 0.118	4.20 ±0.15 0.165	38.00
(15)	9677352509	4	35.00 ±0.90 1.381	25.00 ±0.70 0.985	18.00 ±0.45 0.708	21.00 ±0.50 0.825	3.00 ±0.30 0.118	6.90 ±0.40 0.272	56.00
(16)	9677353509	4	35.00 ±0.90 1.381	35.00 ±0.75 1.380	28.00 ±0.60 1.100	21.00 ±0.50 0.825	3.00 ±0.30 0.118	6.90 ±0.40 0.272	71.00
(17)	9677453509	4	45.00 ±1.00 1.771	35.00 ±0.75 1.380	26.00 ±0.60 1.024	27.00 ±0.50 1.063	3.60 ±0.30 0.142	9.00 ±0.30 0.354	127.00

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Table Continued ...

Row #	Part Number	A _L (nH)	A _L min. @ NI(At)	N/AWG	A _w (cm ²)
(4)	9677001165	18 ±10%	15 - 90	30/24	0.12
(5)	9677001015	39 ±10%	33 - 125	75/24	0.30
(6)	9877000104	39 ±10%	33 - 125	36/24	0.33
(7)	9877000204	49 ±10%	42 - 360	45/24	0.37
(8)	9677142009	55 ±10%	47 - 325	81/28	0.31
(9)	9677182009	66 ±10%	56 - 400	50/20	0.44
(10)	9677182209	65 ±10%	55 - 410	95/22	0.51
(11)	9677242009	88 ±10%	75 - 430	50/18	0.69
(12)	9677242409	84 ±10%	72 - 450	67/18	0.91
(13)	9677282009	100 ±10%	86 - 470	40/18	0.69
(14)	9677282509	95 ±10%	81 - 520	55/18	0.99
(15)	9677352509	124 ±10%	106 - 580	55/16	1.27
(16)	9677353509	110 ±10%	94 - 700	70/16	1.97
(17)	9677453509	142 ±10%	121 - 750	100/16	2.34