

# IRON POWDER CORES

## GENERAL MATERIAL PROPERTIES

Material Mix No.	Reference Permeability ( $\mu_0$ )	Relative Cost	Color Code
- 2	10	5.0	Red / Clear
- 8	35	5.5	Yellow / Red
- 18	55	2.7	Green / Red
- 26	75	1.0	Yellow / White
- 28	22	2.4	Gray / Green
- 33	33	2.2	Gray / Yellow
- 38	85	1.3	Gray / Black
- 40	60	1.0	Green / Yellow
- 45	100	3.0	Black / Black
- 52	75	1.3	Green / Blue

## PERMEABILITY WITH DC BIAS

Material Mix No.	$H_{DC} = 50$ Oersteds	
	% $\mu_0$	$\mu$ effective
- 2	100	10
- 8	91	32
- 18	74	41
- 26	51	38
- 28	91	20
- 33	84	28
- 38	51	43
- 40	62	37
- 45	46	46
- 52	59	44

## THERMAL COEFFICIENTS

Material Mix No.	Temp. Coef. of Permeability (+ppm/C <sup>o</sup> )	Coef. Of Lin. Expansion (-ppm/C <sup>o</sup> )	Thermal Conductivity (mW/cm-C <sup>o</sup> )
- 2	95	10	10
- 8	255	10	29
- 18	385	11	21
- 26	825	12	42
- 28	415	11	16
- 33	635	11	20
- 38	955	12	46
- 40	950	11	36
- 45	1040	12	43
- 52	650	12	34

# IRON POWDER CORES

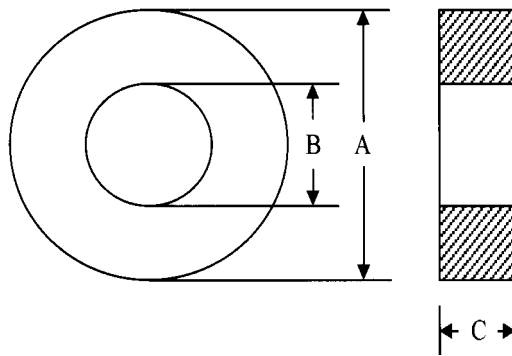
## MAGNETIC TOLERANCE

Material Mix No.	AL Tolerance
- 2	+/-5%
- 8	+/-10%
- 18	+/-10%
- 26	+/-10%
- 28	+/-10%
- 33	+/-10%
- 38	+/-10%
- 40	+/-10%
- 45	+/-10%
- 52	+/-10%

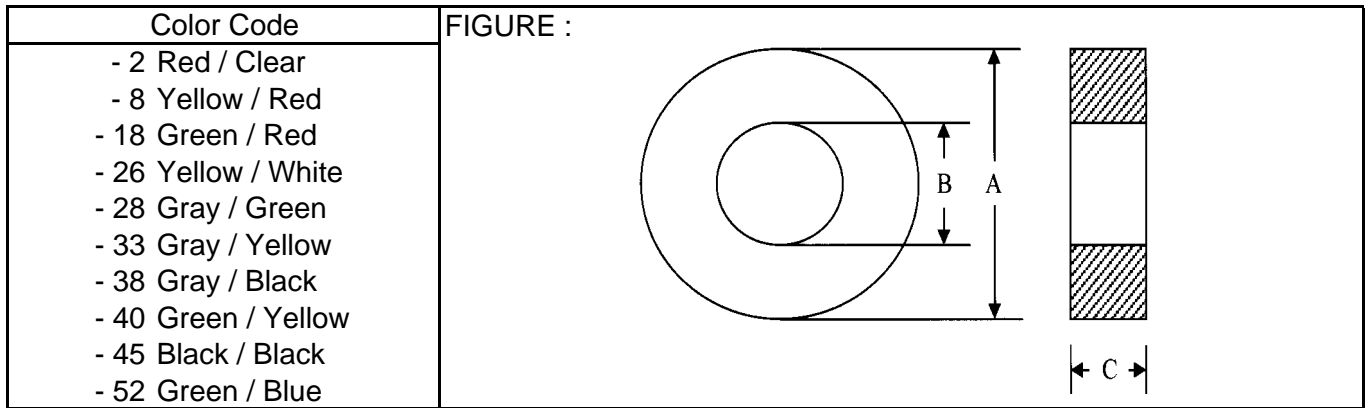
## DIMENSIONAL TOLERANCE

Material Mix No.	A (mm)	B (mm)	C (mm)
T16 - T20	+/-0.30	+/-0.30	+/-0.30
T25 - T38	+/-0.45	+/-0.45	+/-0.45
T44 - T68	+/-0.50	+/-0.50	+/-0.50
T80 - T131	+/-0.50	+/-0.50	+/-0.65
T150 - T184	+/-0.60	+/-0.60	+/-0.80
T200 - T250	+/-0.80	+/-0.80	+/-0.80

FIGURE :

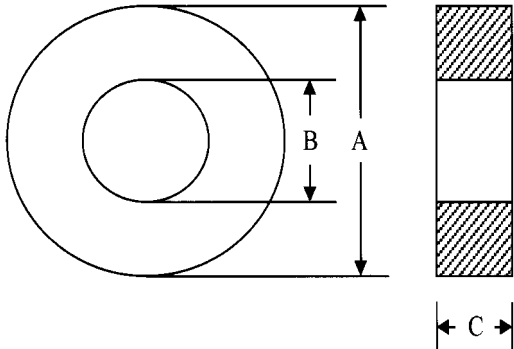


# TOROIDAL CORES

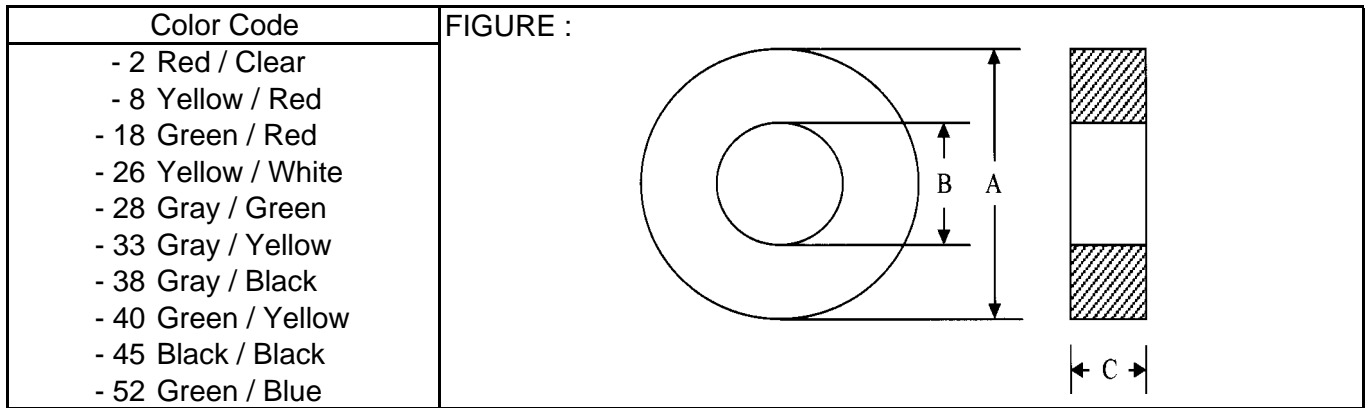


Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T16-2	2.2	4.06	1.98	1.52	0.93	0.015	0.014
T16-8/90	6.0						
T16-18	9.5						
T16-26	14.5						
T16-40	12.5						
T16-45	17.0						
T16-52	13.5						
T20-2	2.5	5.08	2.24	1.78	1.15	0.023	0.026
T20-8/90	7.8						
T20-18	13.0						
T20-26	18.5						
T20-40	16.0						
T20-45	22.5						
T20-52	17.5						
T25-2	3.4	6.48	3.05	2.44	1.50	0.037	0.055
T25-8/90	10.0						
T25-18	17.0						
T25-26	24.5						
T25-40	20.5						
T25-45	31.0						
T25-52	23.0						
T26-8/90	24.0	6.73	2.67	4.83	1.47	0.090	0.133
T26-18	41.5						
T26-26	57.0						
T26-40	49.5						
T26-45	77.0						
T26-52	56.0						
T30-2	4.3	7.80	3.84	3.25	1.84	0.060	0.110
T30-8/90	14.0						
T30-18	22.0						
T30-26	33.5						
T30-40	28.0						
T30-45	40.5						
T30-52	30.5						
T37-2	4.0	9.53	5.21	3.25	2.31	0.064	0.147
T37-8/90	12.0						
T37-18	19.0						
T37-26	28.5						
T37-40	24.5						
T37-45	34.0						
T37-52	26.0						

# TOROIDAL CORES

Color Code		FIGURE :					
- 2 Red / Clear - 8 Yellow / Red - 18 Green / Red - 26 Yellow / White - 28 Gray / Green - 33 Gray / Yellow - 38 Gray / Black - 40 Green / Yellow - 45 Black / Black - 52 Green / Blue							
Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T38-2	7.4	9.53	4.45	4.83	2.18	0.114	0.248
T38-8/90	20.0						
T38-18	36.0						
T38-26	49.0						
T38-40	41.5						
T38-45	65.0						
T38-52	49.0						
T44-2	5.2	11.20	5.82	4.04	2.68	0.099	0.266
T44-8/90	18.0						
T44-18	25.5						
T44-26	37.0						
T44-40	31.0						
T44-45	46.5						
T44-52	35.0						
T44-52D	58.0	11.20	5.82	6.35	2.68	0.212	0.567
T50-2	4.9	12.70	7.70	4.83	3.19	0.112	0.358
T50-8/90	17.5						
T50-18	24.0						
T50-26	33.0						
T50-38	37.5						
T50-40	29.5						
T50-45	44.0						
T50-52	33.0						
T50-8B/90	23.0	12.70	7.70	6.35	3.19	0.148	0.471
T50-18B	32.0						
T50-26B	43.5						
T50-38B	49.5						
T50-40B	38.5						
T50-45B	58.0						
T50-52B	43.5						
T50-8C/90	28.3	12.70	7.70	8.51	3.19	0.223	0.711
T50-26C	61.0						
T50-26D	72.0	12.70	7.70	9.53	3.19	0.223	0.711
T50-40D	59.0						
T50-52D	66.0						
T51-8C/90	37.0	12.70	5.08	6.35	2.79	0.223	0.622
T51-18C	55.0						
T51-26C	83.0						
T51-40C	67.0						
T51-52C	75.0						

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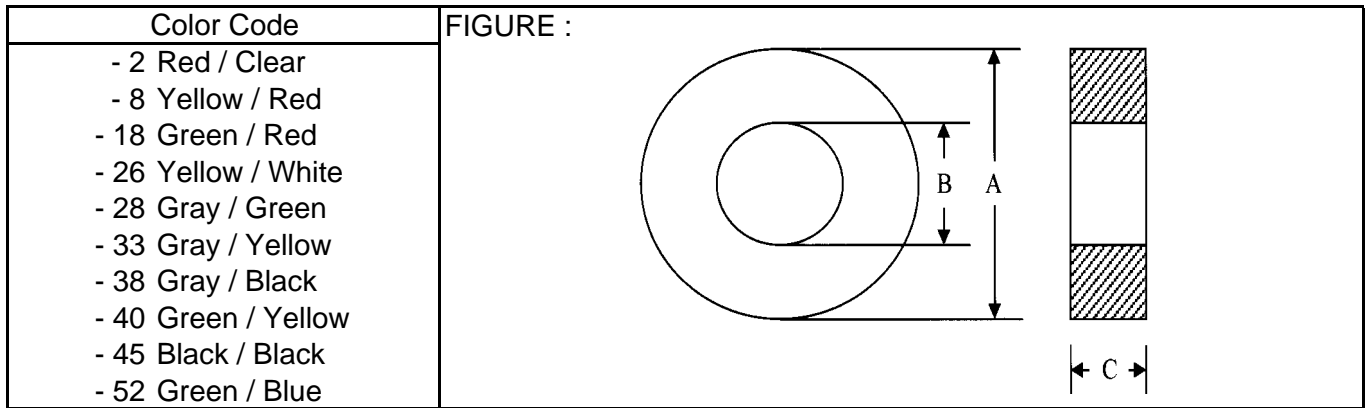


Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T60-2	6.5	15.20	8.53	5.94	3.74	0.187	0.699
T60-8/90	19.0						
T60-18	34.5						
T60-26	50.0						
T60-40	41.5						
T60-52	47.0						
T60-26D	97.0	15.20	8.53	11.90	3.74	0.374	1.400
T60-52D	94.0						
T68-2	5.7	17.50	9.40	4.83	4.23	0.179	0.759
T68-8/90	19.5						
T68-18	29.0						
T68-26	43.5						
T68-38	45.0						
T68-40	35.0						
T68-45	53.0						
T68-52	40.0						
T68-2A	7.0	17.50	9.40	6.35	4.23	0.242	1.030
T68-8A/90	26.0						
T68-18A	39.5						
T68-26A	58.0						
T68-38A	61.0						
T68-40A	47.0						
T68-45A	71.0						
T68-52A	54.0						
T68-2D	11.4	17.50	9.40	9.53	4.23	0.358	1.520
T68-26D	87.0						
T68-40D	70.0						
T68-52D	80.0						
T80-2	5.5	20.20	12.60	6.35	5.14	0.231	1.190
T80-8/90	18.0						
T80-18	31.0						
T80-26	46.0						
T80-38	48.0						
T80-40	39.5						
T80-45	56.0						
T80-52	42.0						
T80-8B/90	29.5	20.20	12.60	9.53	5.14	0.347	1.780
T80-18B	46.5						
T80-26B	71.0						
T80-38B	72.0						
T80-40B	59.0						

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Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T80-45B	84.0	20.20	12.60	9.53	5.14	0.347	1.78
T80-52B	63.0						
T80-26D	92.0	20.20	12.60	12.70	5.14	0.435	2.33
T80-40D	79.0						
T80-52D	83.0						
T90-8/90	30.0	22.90	14.00	9.53	5.78	0.395	2.28
T90-18	47.0						
T90-26	70.0						
T90-38	73.0						
T90-40	57.0						
T90-45	85.0						
T90-52	64.0						
T94-2	8.4	23.90	14.20	7.92	5.97	0.362	2.16
T94-8/90	25.0						
T94-18	42.0						
T94-26	60.0						
T94-38	65.0						
T94-40	49.0						
T94-45	76.0						
T94-52	57.0						
T106-2	13.5	26.90	14.50	11.10	6.49	0.659	4.28
T106-8/90	45.0						
T106-18	70.0						
T106-26	93.0						
T106-28	30.0						
T106-33	40.0						
T106-38	108.0						
T106-40	81.0						
T106-45	125.0						
T106-52	95.0						
T106-18A	49.0	26.90	14.50	7.92	6.49	0.461	3.00
T106-26A	67.0						
T106-40A	58.0						
T106-52A	67.0						
T106-18B	91.0	26.90	14.50	14.60	6.49	0.858	5.57
T106-26B	124.0						
T106-40B	106.0						
T106-52B	124.0						
T130-2	11.0	33.00	19.80	11.10	8.28	0.698	5.78
T130-8/90	35.0						
T130-18	58.0						

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Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T130-26	81.0	33.00	19.80	11.10	8.28	0.698	5.78
T130-28	25.0						
T130-33	33.5						
T130-38	90.0						
T130-40	69.0						
T130-45	105.0						
T130-52	79.0						
T130-26A	41.0	33.00	19.80	5.72	8.28	0.361	2.99
T130-40A	34.0						
T131-8/90	52.5	33.00	16.30	11.10	7.72	0.885	6.84
T131-18	79.0						
T131-26	116.0						
T131-33	46.5						
T131-40	93.0						
T131-52	108.0						
T150-26	96.0	38.40	21.50	11.10	9.38	0.887	8.31
T150-40	78.0						
T150-52	89.0						
T150-26A	66.0	38.40	21.50	8.26	9.38	0.657	6.16
T150-38A	74.5						
T150-45A	84.0						
T157-2	14.0	39.90	24.10	14.50	10.10	1.060	10.70
T157-8/90	42.0						
T157-18	73.0						
T157-26	100.0						
T157-28	31.5						
T157-33	43.5						
T157-38	112.0						
T157-40	86.0						
T157-45	130.0						
T157-52	99.0						
T175-2	15.0	44.50	27.20	16.50	11.20	1.340	15.00
T175-18	82.0						
T175-26	105.0						
T175-40	90.0						
T175-52	105.0						
T184-2	24.0	46.70	24.10	18.00	11.20	1.880	21.00
T184-8/90	72.0						
T184-18	116.0						
T184-26	169.0						
T184-28	51.0						

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Part No.	AL	Dimensions (mm)			Effective Parameters		
	(nH/N <sup>2</sup> )	A	B	C	L(cm)	A(cm <sup>2</sup> )	V(cm <sup>3</sup> )
T184-33	70.0	46.70	24.10	18.00	11.20	1.880	21.00
T184-40	143.0						
T184-52	159.0						
T200-2	12.0	50.80	31.80	14.00	13.00	1.270	16.40
T200-8/90	42.5						
T200-18	67.0						
T200-26	92.0						
T200-28	28.0						
T200-33	37.0						
T200-40	79.0						
T200-52	92.0						
T200-2B	21.8	50.80	31.80	25.40	13.00	2.320	30.00
T200-8B/90	78.5						
T200-18B	120.0						
T200-26B	160.0						
T200-40B	142.0						
T200-52B	155.0						
T225-2	12.0	57.20	35.70	14.00	14.60	1.420	20.70
T225-8/90	42.5						
T225-18	67.0						
T225-26	98.0						
T225-28	28.0						
T225-33	37.0						
T225-40	78.0						
T225-52	92.0						
T225-2B	21.5	57.20	35.70	25.40	14.60	2.590	37.80
T225-26B	160.0						
T225-52B	155.0						
T250-18	177.0	63.50	31.80	25.40	15.00	3.840	57.40
T250-26	242.0						
T250-40	194.0						
T250-52	242.0						