



**Part Number:** **T184-1**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	46.74 mm 47.37 mm	1.840 in 1.865 in									
<b>ID</b>	(nom. - bare core) (min. - after coating)	24.13 mm 23.50 mm	0.950 in 0.925 in									
<b>Ht</b>	(nom. - bare core) (max. - after coating)	18.03 mm 18.80 mm	0.710 in 0.740 in									
<b>Mass</b>	(approximate)	130 grams										
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	1.88 cm <sup>2</sup>										
	L <sub>e</sub> - Eff. Mag. Path Length	11.2 cm										
	V <sub>e</sub> - Eff. Core Volume	21.0 cm <sup>3</sup>										
	WA - Min. Eff. Window Area	4.34 cm <sup>2</sup>										
	sa - Surface Area	80.9 cm <sup>2</sup>										
	mlt - mean length per turn	7.32 cm										
<b>Inductance</b>	μ <sub>i</sub> (reference)	20										
	A <sub>L</sub> value (nominal)	50 nH/N <sup>2</sup>										
	Test Winding	N=100, #24 AWG										
	Frequency	10 kHz										
	Voltage on Agilent 4284A	0.83 V										
<b>Core Loss</b>	A <sub>L</sub> tolerance	±10%										
	Core Loss(mW/cm <sup>3</sup> )=	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$										
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and:	a=1.90E+09, b=2.00E+08, c=9.00E+05, d=4.30E-15										
	B <sub>pk</sub>	140 G										
	frequency	100 kHz										
<b>DC Saturation</b>	Core Loss (nominal)	31 mW/cm <sup>3</sup>										
	Core Loss (maximum)	36 mW/cm <sup>3</sup>										
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$										
	where H expressed in oersteds, and:	a=1.00E-02, b=1.14E-06, c=1.43, d=0.00										
<b>Coating/Pkg</b>	H <sub>DC</sub>	200 Oe										
	Percent Initial Perm(nom.)	82.2%										
	Percent Initial Perm(min.)	78.0%										
	Coating Type:	Blue/Clear Epoxy Paint										
<b>Winding Table</b>	Voltage Breakdown (min.)	500 Vrms, 60Hz										
	Limit	3 mA, 5 s										
	Package Quantity	140 Pcs/Box										
	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26
Single Layer	mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Turns	17	22	28	36	45	57	71	89	111	139	174
Full Winding	Rdc(Ω)	2.6 m	5.3 m	10.7 m	21.8 m	43.3 m	87.3 m	173.0 m	344.8 m	683.9 m	1.4	2.7
	Turns	23	35	54	84	130	202	312	483	747	1,157	1,790
Full Winding	Rdc(Ω)	3.5 m	8.4 m	20.6 m	50.9 m	125.2 m	309.4 m	760.0 m	1.9	4.6	11.3	27.9

