



Part Number: **T184-30**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	46.74 mm 47.37 mm	1.840 in 1.865 in
ID	(nom. - bare core) (min. - after coating)	24.13 mm 23.50 mm	0.950 in 0.925 in
Ht	(nom. - bare core) (max. - after coating)	18.03 mm 18.80 mm	0.710 in 0.740 in
Mass	(approximate)	130 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.88 cm ²	
	L _e - Eff. Mag. Path Length	11.2 cm	
	V _e - Eff. Core Volume	21.0 cm ³	
	WA - Min. Eff. Window Area	4.34 cm ²	
	sa - Surface Area	80.9 cm ²	
	mlt - mean length per turn	7.32 cm	
Inductance	μ _i (reference)	22	
	A _L value (nominal)	51 nH/N ²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.83 V	
A _L tolerance	±10%		
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=3.30E+08, b=2.00E+07, c=2.00E+06, d=1.10E-13		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	129 mW/cm ³	
Core Loss (maximum)	149 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.00E-02, b=4.10E-06, c=1.34, d=0.00		
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	66.7%	
Percent Initial Perm(min.)	61.1%		
Coating/Pkg	Coating Type:	Green/Gray Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	140 Pcs/Box	

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	17	22	28	36	45	57	71	89	111	139	174
		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
Full Winding	Turns	23	35	54	84	130	202	312	483	747	1,157	1,790	
	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	

