



Part Number: **T130-19**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	33.02 mm 33.53 mm	1.300 in 1.320 in
ID	(nom. - bare core) (min. - after coating)	19.81 mm 19.30 mm	0.780 in 0.760 in
Ht	(nom. - bare core) (max. - after coating)	11.10 mm 11.73 mm	0.437 in 0.462 in
Mass	(approximate)	39 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.698 cm ²	
	L _e - Eff. Mag. Path Length	8.28 cm	
	V _e - Eff. Core Volume	5.78 cm ³	
	WA - Min. Eff. Window Area	2.93 cm ²	
	sa - Surface Area	39.8 cm ²	
	mlt - mean length per turn	4.73 cm	
Inductance	μ _i (reference)	55	
	A _L value (nominal)	58 nH/N ²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.31 V	
A _L tolerance	±10%		
Core Loss	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.90E+09, b=8.40E+07, c=2.10E+06, d=5.00E-14		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	54 mW/cm ³	
Core Loss (maximum)	62 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=3.60E-06, c=1.69, d=0.00		
	H _{DC}	100 Oe	
	Percent Initial Perm(nom.)	53.8%	
Percent Initial Perm(min.)	46.2%		
Coating/Pkg	Coating Type:	Red/Green Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	500 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	14	18	22	29	36	46	58	73	91	114	142
		Rdc(Ω)	1.4 m	2.8 m	5.4 m	11.4 m	22.4 m	45.6 m	91.4 m	182.9 m	362.6 m	722.4 m	1.4
Full Winding	Turns	15	24	37	57	88	136	211	326	504	781	1,208	
	Rdc(Ω)	1.5 m	3.7 m	9.1 m	22.3 m	54.8 m	134.7 m	332.4 m	816.7 m	2.0	4.9	12.2	

