



Part Number: **T131-18**

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)	16.26 mm 15.75 mm	0.640 in 0.620 in
Ht	(nom. - bare core) (max. - after coating)	11.10 mm 11.73 mm	0.437 in 0.462 in
Mass	(approximate)	45 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.885 cm ²	
	L _e - Eff. Mag. Path Length	7.72 cm	
	V _e - Eff. Core Volume	6.84 cm ³	
	WA - Min. Eff. Window Area	1.95 cm ²	
	sa - Surface Area	38.3 cm ²	
	mlt - mean length per turn	4.91 cm	
Inductance	μ _i (reference)	55	
	A _L value (nominal)	79 nH/N ²	
	Test Winding	N=100, #26 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.39 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=8.00E+08, b=1.70E+08, c=9.00E+05, d=3.10E-14		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	46 mW/cm ³	
Core Loss (maximum)	53 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=4.72E-06, c=1.65, d=0.00		
	H _{DC}	100 Oe	
	Percent Initial Perm(nom.)	51.4%	
Percent Initial Perm(min.)	43.9%		
Coating/Pkg	Coating Type:	Green/Red 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	11	14	18	23	29	37	47	59	74	92	116
		Rdc(Ω)	1.1 m	2.2 m	4.6 m	9.3 m	18.7 m	38.0 m	76.8 m	153.4 m	305.9 m	604.9 m	1.2
Full Winding	Turns	10	16	24	38	59	91	140	217	336	520	804	
	Rdc(Ω)	1.0 m	2.6 m	6.1 m	15.4 m	38.1 m	93.5 m	228.8 m	564.1 m	1.4	3.4	8.4	

