



Part Number: **T130-17**

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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)	28 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	
Inductance	μ _i (reference)	4	
	A _L value (nominal)	4 nH/N ²	
	Test Winding	N=100, #24 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 V	
Core Loss & Q	A _L tolerance	±5%	
	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=4.00E+09, b=3.00E+08, c=2.70E+06, d=4.40E-16	
	Q test winding	N=6, #20 AWG	
	Q frequency	40 MHz	
DC Saturation	Q min on HP4342A	171	
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00	
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
Coating/Pkg	Percent Initial Perm(min.)	99.4%	
	Coating Type:	Blue/Yellow Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
Winding Table	Package Quantity	500 Pcs/Box	
	Wire Size	AWG	8 10 12 14 16 18 20 22 24 26 28
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	14 18 22 29 36 46 58 73 91 114 142	
Full Winding	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	
	Turns	15 24 37 57 88 136 211 326 504 781 1,208	
Full Winding	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	

