



Part Number: **T94-1**

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OD	(nom. - bare core) (max. - after coating)	23.93 mm 24.43 mm	0.942 in 0.962 in
ID	(nom. - bare core) (min. - after coating)	14.22 mm 13.72 mm	0.560 in 0.540 in
Ht	(nom. - bare core) (max. - after coating)	7.92 mm 8.56 mm	0.312 in 0.337 in
Mass	(approximate)	14 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.362 cm ²	
	L _e - Eff. Mag. Path Length	5.97 cm	
	V _e - Eff. Core Volume	2.16 cm ³	
	WA - Min. Eff. Window Area	1.48 cm ²	
	sa - Surface Area	21.0 cm ²	
	mlt - mean length per turn	3.47 cm	
Inductance	μ _i (reference)	20	
	A _L value (nominal)	16 nH/N ²	
	Test Winding	N=100, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.16 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=1.90E+09, b=2.00E+08, c=9.00E+05, d=4.30E-15		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	31 mW/cm ³	
Core Loss (maximum)	36 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=1.14E-06, c=1.43, d=0.00		
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	82.2%	
Percent Initial Perm(min.)	78.0%		
Coating/Pkg	Coating Type:	Blue/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	1,250 Pcs/Box	

Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	12	15	20	25	32	40	51	64	80	100	126
		Rdc(Ω)	1.4 m	2.7 m	5.7 m	11.4 m	23.2 m	46.2 m	93.6 m	186.9 m	371.5 m	738.5 m	1.5
Full Winding	Turns	12	19	29	44	69	106	165	255	394	610	944	
	Rdc(Ω)	1.4 m	3.4 m	8.3 m	20.1 m	50.1 m	122.4 m	302.9 m	744.6 m	1.8	4.5	11.1	

