



**Part Number:** **T94-17**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	23.93 mm 24.43 mm	0.942 in 0.962 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	14.22 mm 13.72 mm	0.560 in 0.540 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	7.92 mm 8.56 mm	0.312 in 0.337 in
<b>Mass</b>	(approximate)	10 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.362 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	5.97 cm	
	V <sub>e</sub> - Eff. Core Volume	2.16 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	1.48 cm <sup>2</sup>	
	sa - Surface Area	21.0 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	4	
	A <sub>L</sub> value (nominal)	2.9 nH/N <sup>2</sup>	
	Test Winding	N=100, #28 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 V	
<b>Core Loss &amp; Q</b>	A <sub>L</sub> tolerance	±5%	
	Core Loss(mW/cm <sup>3</sup> )=	$\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$	
	where B <sub>pk</sub> 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=10, #20 AWG	
	Q frequency	40 MHz	
<b>DC Saturation</b>	Q min on HP4342A	180	
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00	
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
<b>Coating/Pkg</b>	Percent Initial Perm(min.)	99.4%	
	Coating Type:	Blue/Yellow Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
<b>Winding Table</b>	Package Quantity	1,250 Pcs/Box	
	Wire Size	AWG	10 12 14 16 18 20 22 24 26 28 30
<b>Single Layer</b>	mm	2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315 0.250	
	Turns	12 15 20 25 32 40 51 64 80 100 126	
<b>Full Winding</b>	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	
	Turns	12 19 29 44 69 106 165 255 394 610 944	
<b>Full Winding</b>	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	

