



**Part Number:** **T37-17**

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<b>OD</b>	(nom. - bare core) (max. - after coating)	9.53 mm 9.91 mm	0.375 in 0.390 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	5.21 mm 4.83 mm	0.205 in 0.190 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	3.25 mm 3.76 mm	0.128 in 0.148 in
<b>Mass</b>	(approximate)	0.71 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0640 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	2.31 cm	
	V <sub>e</sub> - Eff. Core Volume	0.147 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	0.183 cm <sup>2</sup>	
	sa - Surface Area	3.47 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	4	
	A <sub>L</sub> value (nominal)	1.5 nH/N <sup>2</sup>	
	Test Winding	N=52, #30 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=8, #24 AWG	
	Q frequency	65 MHz	
<b>DC Saturation</b>	Q min on HP4342A	114	
	%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	20,000 Pcs/Box	
	Wire Size	AWG	20 22 24 26 28 30 32 34 36 38 40
<b>Single Layer</b>	mm	0.800 0.630 0.500 0.400 0.315 0.250 0.200 0.160 0.125 0.100 0.080	
	Turns	12 16 21 26 34 42 53 67 84 105 132	
<b>Full Winding</b>	Rdc(Ω)	6.0 m 12.7 m 26.5 m 52.2 m 108.6 m 213.4 m 428.3 m 861.2 m 1.7 3.4 6.8	
	Turns	13 20 32 49 76 117 181 280 433 671 1,038	
<b>Full Winding</b>	Rdc(Ω)	6.5 m 15.9 m 40.4 m 98.4 m 242.8 m 594.5 m 1.5 3.6 8.9 21.8 53.7	

