



Part Number: **T37-7**

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OD	(nom. - bare core) (max. - after coating)	9.53 mm 9.91 mm	0.375 in 0.390 in
ID	(nom. - bare core) (min. - after coating)	5.21 mm 4.83 mm	0.205 in 0.190 in
Ht	(nom. - bare core) (max. - after coating)	3.25 mm 3.76 mm	0.128 in 0.148 in
Mass	(approximate)	0.74 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0640 cm ²	
	L _e - Eff. Mag. Path Length	2.31 cm	
	V _e - Eff. Core Volume	0.147 cm ³	
	WA - Min. Eff. Window Area	0.183 cm ²	
	sa - Surface Area	3.47 cm ²	
Inductance	μ _i (reference)	9	
	A _L value (nominal)	3.2 nH/N ²	
	Test Winding	N=52, #30 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=9.60E-16	
	Q test winding	N=52, #30 AWG	
	Q frequency	5.3 MHz	
DC Saturation	Q min on HP4342A	166	
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.48E-07, c=1.46, d=0.00	
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	96.7%	
Coating/Pkg	Percent Initial Perm(min.)	95.7%	
	Coating Type:	White/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
Winding Table	Package Quantity	20,000 Pcs/Box	
	Wire Size	AWG	20 22 24 26 28 30 32 34 36 38 40
Single Layer	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	
Full Winding	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	
Full Winding	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	

